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# Health Committee

## FOURTH SESSION

*Held at Geneva from Monday, April 20th, to Saturday, April 25th,* 1925.

### LIST OF MEMBERS OF THE COMMITTEE

| | |
|---|---|
| Dr. Th. MADSEN, *President,* | Director of the State Serum Institute, Copenhagen. |
| M. O. VELGHE, *Vice-President,* | Secretary-General of the Ministry of the Interior and of Health, Brussels. |
| Professor Léon BERNARD, *Vice-Pres.,* | Professor of Hygiene at the Faculty of Medicine of the University of Paris. |
| Dr. A. LUTRARIO, *Vice-President,* | Late Director-General of the Health Department at the Ministry of the Interior, Rome. |
| Sir George BUCHANAN, C.B., M D., | Senior Medical Officer of the Ministry of Health, London. |
| Professor J. CANTACUZÈNE, | Professor at the University of Bucarest. |
| Dr. H. CARRIÈRE, | Director of the Federal Health Department, Berne. |
| Dr. W. CHODZKO, | Former Polish Minister of Health. |
| Dr. N. M. J. JITTA, | President of the Health Council of the Netherlands, The Hague. |
| Professor Ricardo JORGE, | Director-General of Public Health, Lisbon. |
| Dr. M. TSURUMI, | Representative of the Japanese Public Health Service. |
| Dr. B. NOCHT, | Director of the Institute for Tropical Diseases, Hamburg. |
| Professor Donato OTTOLENGHI, | Professor of Hygiene at the Royal University, Bologna. |
| Professor Gustavo PITTALUGA, | Catedratico de la Facultad de Medicina, Madrid. |
| Dr. L. RAYNAUD, | Inspecteur général des Services d'hygiène d'Algérie, Algiers. |
| Dr. L. RAJCHMAN, | The Medical Director, acted as Secretary of the Committee. |

*Absent*

| | |
|---|---|
| Surgeon-General H. S. CUMMING, | Director-General of the United States Public Health Service, Washington. |
| Dr. Carlos CHAGAS, | Director of the Instituto Oswaldo Cruz, Rio de Janeiro. |
| Dr. A. GRANVILLE. | Late President of the Conseil sanitaire, maritime et quarantenaire, Alexandria. |
| Dr. Alice HAMILTON, | Associate-Professor of Industrial Hygiene, Harvard Medical School, Boston. |
| Dr. P. MIMBELA, | Professor at the Faculty of Medicine, Lima. |

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# FIRST MEETING

*Held at Geneva on Monday, April 20th, 1925, at 11.30 a.m.*

Present: All the members of the Committee with the exception of Dr. Chagas, Surgeon-General Cumming, Dr. Alice Hamilton, Dr. Granville, Dr. Mimbela and Dr. Raynaud.

128. **Opening Speech by the President.**

The PRESIDENT welcomed the members of the Committee and was happy to note that Professor Nocht was restored to good health. Dr. Chagas, Dr. Alice Hamilton and Dr. Mimbela had informed him that they were unable to attend the session. Dr. Granville, unfortunately, was still ill. It was hoped that Surgeon-General Cumming would be able to attend the session. Dr. Raynaud would probably be present at the next meeting.

The President reminded the Committee that Dr. EICHEL, of the Epidemiological Intelligence Service of the Health Section of the Secretariat, had recently died. Dr. Eichel's name was well known because of his important works on tuberculosis and medical statistics. He had been an assiduous worker, whose technical skill and personal charm had been appreciated by all who had come into contact with him. He had contributed in a large measure to the establishment of closer relations between the various statistical services. Had he been spared to finish his work, he would undoubtedly, on his return to America, have strengthened the ties between the medical profession of the United States and the Health Committee of the League. The Health Committee would always remember Dr. Eichel, whose death had been a great loss to the Health Section of the Secretariat.

129. **Agenda of the Session.**

The PRESIDENT proposed that the Committee should meet every morning at ten, the afternoons being devoted to the work of the Commissions and Sub-Committees.

*This proposal was adopted.*

Dr. RAJCHMAN read a memorandum giving the order in which the various questions on the agenda might be discussed, at both the morning and afternoon meetings.

Sir George BUCHANAN said that, in regard to the work of the Tuberculosis Commission, most members of the Health Committee appeared to be interested in this important question, and he therefore suggested that practically all the members of the full Committee might perhaps take part in the work of that Commission.

He hoped that longer time than formerly would be given to the discussion of epidemiological intelligence, since that was an extremely important side of the Committee's activities.

The budget would be submitted to the Committee on the following Wednesday, but he would like to be informed, if possible, of the provisional intentions of the Secretariat in this respect. Would the budget be the same figure as that of the previous year, or had an increase been made ? A preliminary statement would enable members to discuss the matter with fuller information at their disposal.

In regard to instruction in public health, Sir George Buchanan desired to make a statement on what was being done in Great Britain in regard to this question. That statement might be of use to the Commission concerned.

At the suggestion of Professor Léon BERNARD, the PRESIDENT asked Sir George Buchanan to submit his observations in the afternoon to the Commission on Instruction in Public Health.

Dr. TSURUMI, without wishing to raise any objection to the request made by Sir George Buchanan concerning the discussion on tuberculosis, pointed out that it was in order to enable the Commissions to perform efficient work that the number of members had been restricted.

Dr. RAJCHMAN, at the request of the President, explained the following points to Sir George Buchanan.

The bureau of the Committee had thought that it would be preferable to have a preliminary discussion on any question in plenary meeting before sending it to the appropriate Commission. This procedure would be followed as regards tuberculosis, and also as regards the question of training in public health.

In regard to epidemiological information, the preliminary examination which would take place in the plenary meeting would enable the Committee to form an estimate of the amount of discussion which would be necessary in the future. It would perhaps be necessary to examine this question in a special Commission.

In regard to the budget, the estimates had been prepared by the Secretariat and the document would be distributed.

M. VELGHE raised the question of the representation of the Committee on the Advisory Committee for the Protection of Children. The report of the Medical Director stated that

Professor Léon Bernard, who had been appointed to represent the Committee, "would closely consult all his colleagues before the meetings and particularly those who have a special interest in child welfare". It would therefore perhaps be useful if the Committee, in adopting the agenda of its present session, made provision for an exchange of views in regard to the instructions to be given to its representative.

Professor Léon BERNARD supported this proposal, and reminded the Committee that he had been appointed urgently by an exchange of letters because the session of the Advisory Committee in question had originally been announced for February 1925. The session had now been postponed till May, and he would therefore be glad if an occasion could be given to the Committee to express its opinion in regard to his appointment, and, if it approve the appointment, to proceed to an exchange of views in regard to the position which its representative should take up when attending the meetings of the Advisory Committee for the Protection of Children.

On the proposal of Dr. RAJCHMAN, *the Committee decided to discuss this question on the afternoon of Wednesday, April 22nd.*

*The provisional agenda was adopted.* (Annex 46.)

130. **Hearing of Experts during the Discussion of Special Questions.**

Dr. JITTA, on behalf of the Dutch Minister for the Colonies, asked that Dr. de Vogel, an expert in questions concerning the Far East and more especially the Dutch East Indies, should be authorised to assist during the discussion on the Health Convention for the Far East. The Dutch Foreign Minister had written to the Secretary-General of the League in this sense.

On the proposal of the PRESIDENT, *the Committee acceded to the request of Dr. Jitta.*

Sir George BUCHANAN asked if Dr. Greenwood, who had drawn up the statistical reports submitted to the Statistical Sub-Committee of the Cancer Commission, could sit as a member of the full Committee when it discussed that question.

*The Committee decided in the affirmative.*

At the request of Dr. LUTRARIO, *the Committee decided to authorise Dr. Niceforo to take part in these discussions.*

131. **Examination of the Report of the Medical Director on the Work accomplished by the Health Organisation since the Third Session of the Committee.**

The PRESIDENT invited Dr. Carozzi, Head of the Health Section of the International Labour Office, to come to the table of the Committee.

*International Opium Convention of* 1925.

The relevant passage of the report of the Medical Director was read (Annex 47, Chapter I, 3).

Dr. CARRIÈRE explained the various provisions contained in the new Opium Convention to which the report referred. After reading Article 10 of the Convention, he explained that it would be the duty of the Health Committee to investigate at once the question of the substances which should fall within the terms of the Convention and regarding which it would be necessary to obtain an opinion from the Permanent Committee of the Office international d'hygiène publique. Professor Knaffl-Lenz had prepared a draft memorandum on this question.

Further, Article 8 of the Opium Convention (which was also read) provided for a similar procedure in regard to substances of a non-habit-forming description which should not fall under the terms of the Convention. Sir George Buchanan had already prepared a preliminary list of those products. Dr. Carrière hoped that the various members of the Committee would also submit suggestions in regard to this matter so that the Committee might draw up the required list as soon as possible.

Sir George BUCHANAN said that he had submitted a small note (Annex 48) containing the British Government's point of view in regard to the question. Broadly speaking, his Government thought that all ambiguity should be avoided as regards certain specified substances containing opium, *e.g.*, Dover powder, which should be exempted from the operation of the Convention. In Great Britain there was a list of substances which were exempt from the provisions of the Hague Opium Convention, and the British Government suggested that those substances should be included under Article 8 of the new Convention.

As provision had now been made for a continuous periodical revision of the schedule of exempt substances, the British Government supported the proposal that the Office international d'hygiène publique should be consulted in regard to all substances to be included in the schedules, in order that these should be discussed by a body composed of the representatives of Governments, and representing a large number of nations.

*The Committee decided that Sir George Buchanan should explain his note* at the meeting of the Opium Commission, when Professor Léon Bernard would also make a statement.

*The result of interchanges in* 1925 *and proposals for* 1926.

The relevant passage in the Medical Director's report was read (Annex 47, Chapter II, Section IV).

In regard to paragraph 4, Dr. RAJCHMAN gave explanations in regard to the collective interchange visit which would take place in the Kingdom of the Serbs, Croats and Slovenes. This interchange visit would begin at Zagreb on May 17th and would last six weeks. The programme and the itinerary would shortly be distributed to the persons taking part in the interchange. As regards the necessary documents, the report of Dr. Stampar would shortly be printed.

Candidates for the interchange visit had been proposed by the health administrations of the following countries: Algeria, United States of America, Belgium, Bulgaria, Czechoslovakia, France, Germany, Great Britain, Greece, Hungary, Palestine, Poland, Portugal, Roumania, Russia. Further, Dr. Haigh would submit the name of a doctor from the health service of Albania.

In regard to paragraph 5, Dr. Rajchman explained that the special work brought out by the Public Health Service of Japan was so voluminous that it could not be published before the end of May. It would nevertheless be distributed in time to persons taking part in the interchange visit and to the members of the Health Committee.

In regard to paragraph 8, Dr. Rajchman explained that it would not be possible, he thought, to fulfil this summer the hope expressed in his report in regard to an interchange visit of port medical officers in accordance with the suggestion of Professor Nocht, since the latest budgetary figures drawn up by the Secretariat appeared to show that there was not sufficient money for the undertaking.

Sir George BUCHANAN noted, in regard to paragraph 1, the suggestion that in the British interchanges some British medical officers should follow the whole course of study. Full attention would be given to this suggestion. In passing, he pointed out that, in the expression of thanks contained in the report, no mention was made of the very considerable aid given by the British Government itself to the interchange visits.

In regard to paragraph 6, he thought that the programme of the South American interchange visit was a very large one. He hoped that it would be successful, but such a programme would of necessity fatigue the participants.

In regard to paragraph 7, he thought that the medical officer for Persia, who it was proposed should come to Europe in order to obtain some knowledge of European methods of health control, should preferably visit Egypt, Morocco, India, the French colonies or some country where conditions were more closely allied to those prevailing in Persia than was the case in Europe.

In regard to paragraph 8, he did not think it very convenient for the limited interchange of port medical officers to take place this year so far as English participation was concerned, as the medical officials in England who were responsible for the port sanitary services were greatly overworked.

In regard to the next proposed visit to Great Britain, Sir George Buchanan begged to remind the Committee that the question was entirely in its hands. There were perhaps too many interchange visits to Great Britain, and other countries should have preference. If, however, the Committee decided that an interchange visit should take place in Great Britain next year, it might advantageously consider the suggestion that the visit should be confined exclusively to London and the participants specially selected with this end in view.

Dr. TSURUMI said that Japan was making ready for the interchange visit which would take place in the following October. The Japanese Government hoped that any member of the Health Committee who could manage to do so would go to Japan in order to examine the public health organisation of that country.

Professor PITTALUGA desired to submit several observations:

1. In regard to paragraph 6, he asked Dr. Rajchman to give the Committee explanations concerning the proposals made by the Director-General of the Health Service of Cuba "for a more permanent organisation of interchanges in Latin-America based on Cuba".

2. The question of the protection of children was of the greatest importance in Spain. The Director-General of the Spanish Health Service had begun investigations into this question. It would therefore be useful if a Spanish doctor, who was an expert in the protection of children, could participate in the proposed interchange visit.

3. In regard to paragraph 9, the passage concerning the visit to Africa seemed to imply that this visit would be organised by some body other than the Health Committee. What steps had been taken to secure a final decision regarding this visit, which the Health Committee alone was competent to take ?

Dr. RAJCHMAN replied in the first place to the observations of Sir George Buchanan:

1. If the British authorities were ready to accept in principle the proposal that a British medical officer should be attached to each group of foreign officers the details of the arrangements to be made could be settled between Sir George Buchanan and the Medical Director.

2. The omission of an expression of gratitude to the British Government would be rectified in the final text of the report.

3. It was to be hoped that the Committee would decide that an interchange visit should take place in Great Britain next year and that account should be taken of the proposal of Sir George Buchanan to the effect that that visit should be confined to London.

4. The observations of Sir George Buchanan in regard to the visit of a Persian health officer seemed to him very well founded Nevertheless, it would not be possible to take a decision before a formal request had been made by the Persian Government. This had not yet been received.

In reply to Professor Pittaluga, Dr. Rajchman gave the following explanations:

1. The organisation of the visit to Africa must be very carefully planned, and, in the event of the Health Committee approving the preliminary scheme which had been drawn up, it would then be examined by the Medical Director in the presence of members of the forthcoming inter-Governmental Conference. The final plan would then be submitted by the Medical Director to the Health Committee at its October session.

2. The Committee should bear in mind the request of Professor Pittaluga in regard to the exchange of specialists in the protection of children.

3. The Medical Director read a letter from the Director-General of the Health Service of Cuba (Annex 49). Since the Latin-American group would return to Geneva during the month of June it would be sufficient for the moment for the Medical Director to thank the Director-General of the Public Health Service of Cuba for his proposal. The Medical Director would then investigate the question with the help of Dr. Destouches and submit proposals to the Committee in October.

Professor PITTALUGA thanked the Medical Director for his proposal. He thought that the Committee should carefully consider whether or not it should accept the Cuban proposal. As a general rule, the Committee could not countenance the establishment of a centre of interchange visits outside the Health Section of the League of Nations, while at the same time it should realise that the support of local bodies in the organisation of an interchange visit was of value. The promise of financial support should not constitute a main factor in taking a decision on this matter.

Professor Léon BERNARD shared Professor Pittaluga's opinion. He added an additional reason. The Committee should be careful to take into account the susceptibilities of the various countries of Latin-America.

Dr. LUTRARIO reminded the Committee that, at a former session, he had proposed the organisation of an interchange visit of sanitary engineers, and that the Health Committee had taken this suggestion into consideration. He did not think it necessary to emphasise the importance of a close co-operation between sanitary engineers and health officers. He hoped that the Medical Director would soon organise, as far as circumstances permitted, an interchange visit of this kind.

Dr. RAJCHMAN replied that the financial position was such that it was impossible to organise this interchange for the present year. The question might be examined when the collective interchange visit which would take place next year in London was organised.

M. VELGHE supported the suggestion of Dr. Lutrario. If this interchange visit were decided on by the Committee, preparations should be made a long time in advance. The high cost of building had caused the sanitary engineers to investigate this question very closely at the moment in the various countries, especially in America. An interchange visit of sanitary engineers would be very profitable not only from the point of view of health, but also from the point of view of a reduction of expenditure, which was a very important question in health matters, especially in regard to the progress of health conditions in towns and in regard to housing problems.

Sir George BUCHANAN said that this question was a very difficult one. There were several possibilities before the Committee. It was difficult to find a specialist who was equally conversant with such matters as the purification of the water supply, sewage disposal and housing. It would therefore be difficult for a collective interchange visit to be made without defining exactly what subjects should be examined. He thought that the Committee might formulate concrete proposals as to the subjects which should be investigated.

Dr. RAJCHMAN supported the proposal of M. Velghe, together with the comments made upon it by Sir George Buchanan. If the Committee took a decision in this sense, the Medical Director would prepare a scheme which would be submitted to Dr. Lutrario, M. Velghe, and Sir George Buchanan. The Committee would be able to take a decision with full knowledge of the facts, at a future session. If the investigation of the question resulted in a definite proposal, it would be necessary to obtain the funds required. This might not give rise to any great difficulty. The Committee might adopt a resolution in principle which would emphasise the importance of the interchange visit in question.

Professor PITTALUGA was of opinion that, if the necessary credits were forthcoming, the Committee should give such instructions to the public administrations of each country as would enable them to send specially qualified sanitary engineers to take part in the interchange visit.

M. VELGHE thought that the Medical Director would certainly take account of this suggestion, but that it should be examined by a special Commission. His personal view was that it would be indispensable for health administrations to send officials with sufficient experience to enable them to appreciate what they would see, during the course of the interchange visit, for example, in England where progress as regards sanitary engineering had produced remarkable results.

Sir George BUCHANAN thought that the Committee should have before it the views and suggestions of its members before a final decision could be taken.

M. VELGHE thought that the Committee should adopt immediately a resolution in regard to the proposal of Dr. Lutrario, in order that an interchange visit might be organised for next year. It was only when the Committee had taken a decision that the Medical Director could start work.

The PRESIDENT supported this proposal.

Sir George BUCHANAN said that, if the proposed resolution meant that an interchange visit should take place in the following year, he would raise no objection provided that the Committee examined the memorandum to be drawn up by the Medical Director before it was communicated to the Governments.

The PRESIDENT asked M. Velghe and Dr. Lutrario to draft a resolution.

## SECOND MEETING

*Held at Geneva on Tuesday, April 21st, 1925, at 10 a.m.*

Present: All the members of the Committee with the exception of Dr. Chagas, Surgeon-General Cumming, Dr. Alice Hamilton, Dr. Granville and Dr. Mimbela.

132. **Examination of the Report of the Medical Director on the Work accomplished by the Health Organisation since the Third Session of the Committee** (continuation of the discussion).

DECISIONS OF THE COUNCIL OF THE LEAGUE OF NATIONS IN REGARD TO THE WORK OF THE HEALTH COMMITTEE, AND ACTION ARISING THEREFROM.

(*a*) *Presentation of the Annual Report of the Committee.*

The paragraph of the report of the Medical Director in regard to this matter was read (Annex 47, Chapter I, 1 *a*).

Sir George BUCHANAN reminded the Committee that, at the last session, it had decided that the question of the presentation of the annual report might be raised by one of its members as a question of procedure during the present session. Before reading the note which he had drafted, he would like to emphasise that his proposal was not intended to cover the procedure to be followed for the present year, but that it was intended to come into operation next year.

Sir George Buchanan then read his note (Annex 50) and presented the following proposal:

> " The Health Committee, on consideration of the procedure which is most suitable for the preparation and submission of the annual report required by its Statutes, is of opinion that the terms of this report should be settled by the Committee at its session during the spring of each year, being the last session held before the meeting of the Assembly, and that, subject to the assent of the Council, it should then be distributed as soon as possible to Governments Members of the League and other authorised recipients of the report."

He added that he was led to insist on the idea of an annual report as this was a practice on which the progress of public health, centrally and locally, in England had been built up for the last half-century. The only objection he could conceive to the proposal was that the report, being issued at the end of April, would not, for the purposes of the Assembly, be up to date. This, however, was a small matter which could be met by a supplementary communication. So far as the future of the Health Organisation was concerned, it was not of great moment whether the annual report on its activities concluded in March or in some other month. The essential thing was that there should be a good system of annual reports.

Experience showed that the Assembly required not so much the latest statistics and information in regard to the activities of the Health Committee as a general account of its work. Last year, for example, as a member of the British delegation, he had been asked why the Health Committee was dealing with cancer, and why it should be necessary for the Assembly to vote credits for this purpose. The Assembly had not desired to have the latest statistics and information in regard to the cancer researches of the Committee, but to know what was being done, and how the Committee had come to take up the subject. Such information could be given in an annual report, whether the report terminated in March or August.

M. VELGHE said he had read Sir George Buchanan's note with the greatest interest. It contained many suggestions which the Committee might with advantage examine. The chief point for consideration was the proposal for the establishment of an annual report intended at the same time for the health administrations and for the Committee, and giving in a single summary an account of all the activities of the Committee during the previous year. The note contained some useful indications in regard to the form to be given to the report in order that documentary research might be facilitated. Such research was sometimes difficult for the members of the Committee themselves when they wished to find what they required. It was all the more difficult for persons outside the Committee.

He would like to present at once certain observations arising out of the note of Sir George Buchanan. The most important point was the question for whom the report of the Health Committee was intended. Clearly it was intended in the first place for the members of the Committee themselves. It was a memorandum drawn up by the Medical Director in anticipation of the next session of the Committee, and it was intended to remind the members of the Committee of the position in regard to the work undertaken and to indicate the direction which the work of the Committee was likely to take in the future.

The report was also intended for the Office international d'hygiène publique at Paris, since it had been decided to submit this report to that Office and since it was the duty of the Office to express its opinion in regard to it.

Finally, the report was intended for the Assembly, two Committees of which, namely, the Finance Committee and the Committee which dealt with Technical Organisations, followed the work of the Health Committee with particular interest.

Sir George Buchanan's note contained a proposal which was to a certain extent an innovation. According to this proposal, it was intended that the report of the Committee should also be utilised by the health administrations of all countries, whether they were Members of the League of Nations or not, and by all persons who were professionally interested. It seemed to him at first sight impossible that one and the same document could be of use to so many different persons and bodies. It was clear that members of the Committee would not look in the report for the same kind of information as persons outside the Committee. Budgetary questions, for example, which were important in a document intended for the Assembly were of no interest to the health administrations.

It seemed, therefore, that not one but at least two documents would be necessary. This would not have the effect of increasing the work of the Health Section, as the substance of the principal document might be utilised for the remaining document or documents by omitting certain passages from it.

The Health Committee held two sessions each year, and two reports for the Committee were necessary. As the Assembly met only once a year, only one report would be required for the Assembly. It would suffice if the two reports of the Committee were blended in order that the Assembly might be able to review the work of the Committee as a whole. The report intended for the Assembly might also suffice for public distribution subject to necessary abridgment and to any changes of form in the direction of making it more academic and less utilitarian.

A more important question now arose. At what date must the report be finished and distributed ?

The reports intended for the Committee must cover the interval between the two sessions. For the Assembly, on the other hand, which met on the eve of the October session of the Committee, it appeared hardly possible to draw up a summary of the work of the Committee only up to the end of the previous April. In view of the long interval between April and September, it was advisable that the Assembly should have a document of a fairly recent date, enabling it to acquaint itself with the position in regard to questions placed on the agenda of the October session. It appeared to him necessary, and here he differed from Sir George Buchanan, that, in order fully to satisfy the Assembly, the report should be drawn up in the month of August.

There was yet another point to which the Committee should direct its attention. Sir George Buchanan, in the course of his note, had twice expressed the opinion that the annual report should be distributed sufficiently early for the health administrations to be able to examine it thoroughly. The object was to enable the various health administrations to present their observations and suggestions to the representatives of their Governments attending the Assembly, so that those representatives, during the discussion of the report, might indicate the views of the health administrations of their respective countries.

This raised a delicate question. Doubtless the Committee derived its authority from the League of Nations and it was not in any way suggested that it should affirm its independence in the face of the Assembly. Though it was clear that the Assembly, however, must discuss the report of the Committee, it was not desirable for it to discuss that report thoroughly and go into technical details. One could not expect competence on all questions on the part of an Assembly composed of Members of Parliament and politicians. Such, indeed, was the opinion of the Assembly itself, which had expressly desired that the work of the Committee should be submitted to the Permanent Committee of the Office international d'hygiène publique in Paris, which included a considerable number of health experts who were competent to form an estimate of the work of the Committee. The real work of the Assembly was to examine whether the Committee had managed well the funds allotted to it, and whether the credits which it requested were likely to be judiciously employed. It was also within its rights in expressing its general views on the question whether the new activities on which the Committee was proposing to embark were sufficiently urgent.

It would be dangerous to go further. Except for the Medical Director, the Committee had no one to represent it at the Assembly. A discussion of a technical nature in the Assembly would be prejudicial both to the reputation of the Committee and to the work to which it was so wholeheartedly devoted. Was not the collaboration which had been established with the Permanent Committee of the Office international d'hygiène publique an adequate guarantee for the Assembly ?

In brief, there was no need for the Committee itself to provoke a discussion before the Assembly. If there were need of such a discussion, this should first be conducted in the Committee itself, and subsequently in the Office international, subject to the sense of responsibility and the guarantees required by the Assembly.

*The Committee indicated its agreement with the views expressed by M. Velghe.*

Professor Léon BERNARD said that he associated himself entirely with the observations of M. Velghe and would like to add certain remarks.

The Committee was very grateful to Sir George Buchanan for having drawn attention to the question of the annual report. Sufficient account had not been taken outside the Committee of the considerable work which had been done by the Health Organisation of the League. In the interests of the work which the Committee was doing, and in the interests of the League of Nations itself, it was desirable that the work of the Health Organisation should be better known. It would therefore be well not only to endeavour to improve the report to the Assembly and to the Perma-

nent Committee, but also, as Sir George Buchanan proposed, to present to the general public a review of the work of the Committee.

The proposal, however, was not only to establish a report presenting a general review of this character, but to submit that report to the Assembly for discussion. Was it advisable for the Committee to place itself under a supervision which was not required ? The Assembly had never made any claim in this connection. He would ask the Medical Director to explain the procedure which was adopted in this matter by the other technical organisations of the League of Nations.

At what date should the report be drawn up ? The month of April was an entirely arbitrary date, and would enable anyone outside the Committee to dissect the report, a proceeding which was to be deprecated. August, on the other hand, would have the advantage of increasing the interest of the report for the delegates to the Assembly. There was, however, an immediate objection to this date. If the report were drawn up in August, it could not be approved by the Committee, and it would be drafted by the Secretariat only. In order to meet this objection, it would be sufficient to adopt for the report the procedure which was followed for all urgent questions, namely, to submit it to the bureau of the Committee, unless the Committee preferred to hold a third annual session towards the end of August, a proceeding which was not likely to find favour. It was to be supposed that the bureau of the Committee had the entire confidence of the Committee, and the latter had wisely adopted the plan of appointing its members as Vice-Chairmen in rotation. The report would, according to this plan, be drawn up by the Secretariat, and, before being submitted to the Assembly, would be approved at a meeting of the bureau. This meeting would have the added advantage of ensuring continuity in the relations between the Secretariat and the bureau.

As regards the form of the report, he agreed entirely with M. Velghe. The report intended for persons outside the Committee should not be exactly the same as the report intended for the Committee and for the Assembly.

To sum up, the suggestion of Sir George Buchanan might in principle be approved. This suggestion emphasised the necessity of giving to the report a form enabling a general review of the work of the Committee to be presented. There was in this direction a gap which might very usefully be filled.

Dr. RAJCHMAN, replying to Professor Léon Bernard, explained the procedure followed by the League of Nations. The Secretary-General presented each year to the Assembly two reports. The first was drafted towards the end of June. The second, a supplementary report, was issued towards the end of August. These two reports dealt not only with the work of the Secretariat, but also with that of the technical organisations. There had been considerable discussion in regard to the submission of the annual reports of these organisations. It had been asked whether they should be presented separately from the report of the Secretariat, or be included in that report as special chapters. It had seemed more convenient for the Assembly to have everything in a single volume containing special chapters for each organisation.

As regards the Health Organisation, there had been a discussion last year concerning the report to the Assembly and the report to the Office international d'hygiène publique. Two reports had been drafted, one of which, being intended for the Assembly, had been embodied as a special chapter in the report of the Secretary-General. It was understood that each technical organisation approved the terms of its report.

As regards the question of date, the main report of the Secretary-General which had to be distributed to the Members of the League some time in advance was brought to a conclusion at a fairly early date, but it was possible at the last moment to insert in the supplementary report an account of the latest activities of the Financial and Economic Organisation and of the Transit Organisation.

Sir George BUCHANAN asked the Medical Director whether the technical organisations of the League, other than the Health Organisation, presented reports which had not been first approved by the Committee concerned.

Dr. RAJCHMAN replied that last year the other technical organisations had met in August, and had therefore been able to approve their reports. As regards the Health Committee, there remained the difficulty of calling the Committee together in August. It should be noted, however, that the last report of the Committee had been submitted to the bureau of the Committee.

Sir George BUCHANAN said he was happy to note that M. Velghe and Professor Léon Bernard accepted the principle of an annual report.

Personally, he did not see any difficulty in having a single report which would equally well serve all the purposes of the Committee. He was very familiar in Great Britain with the process of preparing a report intended not only for the Government Departments, but for the use of Parliament, the information of the medical profession and also for the information of the public.

M. Velghe apparently considered it out of the question that any administration should be called upon to advise delegations to the Assembly in regard to the work of the Health Section. This, however, was actually the practice so far as the British delegation was concerned. It was customary for the British delegation to be advised by the competent authority on the work done by the Health Committee, and also on the financial aspects of its activities. He had himself been asked to give explanations to the representatives of the Dominions and of India, who had repeatedly wanted to know precisely what the Health Committee was doing and whether this or that item of expenditure was necessary.

It would, in such circumstances, be of great assistance if there were available for the use of the various delegations of all countries a report on the activities of the past year, which might be presented as embodying the united views of the Health Committee.

It was not clear from the observations made what procedure should be followed in regard to the proposal he had put forward. His proposal was in the form of a resolution, and he was prepared

to accept amendments and to discuss any formula which might give effect to the general views of the Committee, and present an amended proposal at a later meeting. He thought that the present discussion had been useful, particularly as the principle of an annual report appeared to be generally accepted.

Dr. RAJCHMAN thought it was impossible to contemplate the presentation each year by the Committee of a volume comparable to that published by the British Ministry of Health, which was a model for all the health administrations of the world. This volume comprised two reports, one dealing with the work of the Ministry of Health and the other dealing with the position as regards public health in Great Britain. M. Velghe had suggested a report to the Assembly on the work of the Committee as a whole. It was impossible at present to contemplate a report on the position as regards the public health of the whole world.

Professor Léon BERNARD proposed that the Committee should accept the proposal which Sir George Buchanan had just made.

*It was decided that the draft resolution submitted by Sir George Buchanan should be amended,* as a result of the discussion which had taken place, *by a Sub-Committee composed of the* CHAIRMAN, M. VELGHE, Sir George BUCHANAN, Professor Léon BERNARD and Dr. RAJCHMAN.

(*b*) *Sleeping-sickness: Despatch of a Mission to Tropical Africa.*

The passage in the report of the Medical Director relating to this question was read (Annex 47, Chapter I, 1*b*).

Professor PITTALUGA thought that the Health Committee would, naturally, be represented at the Conference planned by the experts of its Commission on Tropical Diseases. Account must be taken of the fact that this would be a Conference of Government delegates. It would be well, however, in view of the discussions and resolutions of the Conference, that the Health Committee should be directly represented.

Dr. RAJCHMAN pointed out that the Conference in question was a Conference of the League of Nations. The history of the question was as follows:

The Health Committee had submitted a recommendation to the Council of the League, which the Council had accepted in principle, to the effect that an international mission should be sent to Tropical Africa in order to study sleeping-sickness. This scheme, however, raised financial, administrative and general questions which only the Governments of the interested countries could settle. The Council had accordingly instructed the Secretary-General to ask those Governments whether they would agree to convene a Conference of representatives of the Colonial Ministries. The Governments had accepted the suggestion, and the British Government, which attached special importance to the question, had expressed a wish that the Conference might meet in London. Nevertheless, the initiative had been taken by the League, and it was clear that the secretariat of the Conference would be the secretariat of the Committee. If the Health Committee decided to be represented at the Conference, arrangements would, of course, be made. It fortunately happened that all the members of the Committee of Experts on sleeping-sickness would be delegates to the Conference.

Professor PITTALUGA thanked the Medical Director for his explanations. He thought it would be useful for the Committee to follow closely the investigations which were to be undertaken, so that, if necessary, it might be able to give advice in regard to the way in which the technical work of the various administrations in Tropical Africa might in future be co-ordinated.

Dr. RAJCHMAN, replying to a question of Professor Léon BERNARD, announced that he would certainly be present at the Conference in London, and the President said that he also hoped to attend.

*This passage of the report was approved.*

(*c*) *Representation of the Health Committee on the Advisory Committee for the Protection of Children.*

The passage in the report of the Medical Director relating to this question was read (Annex 47, Chapter I, 1*c*).

The PRESIDENT explained that Professor Léon Bernard, appointed to represent the Committee on the Advisory Committee, would be at the disposal of the Health Committee on the afternoon of April 22nd, when the instructions to be given to him would be discussed.

*This passage of the report was approved.*

(*d*) *International Sanitary Conference.*

The passage of the report of the Medical Director relating to this question was read (Annex 47, Chapter I, 1*d*).

Dr. TSURUMI said that, in view of the preparatory work which still remained to be done, he thought it might be advisable to adjourn the International Sanitary Conference until at any rate April 1926.

Dr. JITTA doubted whether the work would be sufficiently advanced by October to make it possible to have a profitable discussion at the Conference. It was pointed out in the report of the Medical Director that the provisional Convention adopted by the Pan-American Conference had been addressed to all the members of the Committee. This Convention opened up unexpected possibilities, and it was necessary to discuss it at some length. It would be difficult to arrive at any real result before October. He proposed to deal with the question at length during the afternoon meeting with a view to the preparation of his report. He thought that Dr. Tsurumi's proposal should be examined carefully.

Sir George BUCHANAN said he sympathised with the desire that there should be sufficient time for a consideration of the problems at issue, but he thought that a postponement of the Conference would give rise to more difficulties than it would remove. For example, arrangements had already been made for representatives of the British Dominions and India to attend the Conference. The arrangement to hold the Conference in October had been made last autumn, and though the official invitations had been delayed, it had been generally known that the Conference would take place.

It was important that the question of the date of the Conference should be discussed, but such discussion was difficult until the views of the Office international d'hygiène publique were ascertained. The invitations to the Conference had been issued as a consequence of proposals made by the Office international, and the views of that Office should be taken into consideration.

If the date were made to depend on whether certain special questions relating to the Far East were to be considered at the Conference, it would serve no useful purpose to discuss the question at the present moment. If the date of the Conference were merely a question of general convenience, the matter should be left to the Office international.

M. VELGHE thought that all the members of the Committee were agreed that a discussion upon a possible postponement of the Conference would be more appropriate at a meeting of the Office international in Paris than at the present session of the Health Committee. There was, however, some advantage in discussing the matter at once. The final decision would rest with the French Government. Apparently the majority of the members of the Health Committee, as well as some members of the Permanent Committee of the Office international, would be somewhat at a loss if the Conference met in October. It was true that the date of the Conference had been announced, but, in view of the Convention which had been concluded at Havana, and in the absence of information as to the attitude of certain of the Governments of the Far Eastern countries concerning the draft Convention submitted to them, the Committee would not be able to take up any very definite position at the Conference.

The date had been fixed for October because the French Government had believed that the work of the Office international was sufficiently complete for submission to a Conference. The difficulty of the problem for the countries of the Far East, precisely those countries in which the more formidable epidemics had their origin and development, had since been realised. Moreover, it was noted that the principles embodied in the provisional Havana Convention differed in more than one respect from those adopted in Paris. Further, it was difficult to form an opinion in regard to a draft Convention without knowing the views of Far-Eastern countries, such as India.

In brief, before convening a Conference, it would be advisable for the Permanent Committee of the Office international d'hygiène publique to examine the Havana Convention and the observations of the countries of the Far East on the draft which had been submitted to them. If this were not done, the discussions at the Conference would be confused and prolonged, and agreement between so many countries with different points of view would be difficult to achieve. Perhaps a delay of a few months would in the long run be of advantage for the success of work which had been undertaken.

Professor JORGE supported the views expressed by Sir George Buchanan. The Conference had already been postponed so many times that a fresh postponement might be badly interpreted. The invitations had been sent out, a first step had been taken, and it was advisable to profit from this fact. Doubtless, at the present moment, certain information was lacking, but this information would be at the disposal of the Conference. Whatever preparatory work might be done, it would certainly be impossible to avoid long discussions. The work of a preparatory committee would not prevent the questions of the Far East and of America being raised at the Conference.

Sir George BUCHANAN said that, as the Committee was now dealing with the general observations of the Medical Director on the International Sanitary Convention, he would venture to deal more generally with the matter. He had been struck by the subdued tone of the observations of the Medical Director on this question as compared with the optimism with which other subjects had been treated. Speaking as the representative of a maritime Power, for which the subject was of the utmost importance, he could only express the utmost gratitude to the French Government for having put forward the proposal for a Conference to revise the existing International Sanitary Convention. Three years of incessant work had been done for the revision of this Convention, and it seemed at last that these activities might begin to bear fruit. He agreed that it was not an easy matter to hold so large a Conference, but the difficulties should not be exaggerated.

He thought there was some misconception as to the precise position of the Convention. The Convention was not a perfect instrument, but it had for many years constituted a working *modus vivendi*, and in many countries, including his own, the existing system of quarantine and port sanitation had been built up on these Conventions. They constituted a rough code which embodied a compromise that was admittedly not up to date. There were doubtless points of administration to be improved, and certain important questions affecting commerce to be considered and adjusted.

Personally, he had no misgiving in regard to the principles which had been established at Havana. He had gone carefully into the provisions laid down there, and had satisfied himself that nine-tenths of them were, for practical purposes, identical with those recommended as a result of the work of revision done by the Office international. Agreement as to the remaining tenth could only be reached by discussion at a general Conference attended by responsible delegates bearing authority from their Governments. In England, a study had already been made of the Havana Convention, and the British Government was prepared to discuss, for example, whether the principle of the classification of ports should be followed for South American ports, or extended

to cover the whole world. Without discussion between responsible representatives, no advance could be made.

The questions relating to the Far East might be dealt with by means of a special agreement, supplementary to the main Convention and broadly consistent with its provisions. The delegates from Great Britain and the British Dominions and India would be prepared to discuss such a proposal and would be fully instructed in regard to the views of their Governments.

He did not think there was much to be gained by having the views of the various Governments considered in advance by a preparatory committee. Great Britain welcomed the invitation of the French Government and believed that, on the basis of the work done by the Office international, a general Conference might be convened with every prospect of success.

He could not, in these circumstances, support the suggestion made by M. Velghe that the subject should be referred to a preparatory Committee.

Dr. LUTRARIO wished to add a word in his personal capacity without committing his Government in any way, which had already before it the proposal to convene an International Conference.

Personally, he saw no inconvenience in a brief postponement of the date of such a Conference. He did not think that the fact that the invitation to the various Governments had already been sent out need raise any great difficulty. Precedents were in existence of which the last, that of the International Congress of Rome on Malaria, was a prominent example. The Congress, which had been fixed for next May, had now been postponed till October.

Further, the Committee should take into account the international conventions which had already been concluded in the last few years. Conventions of this kind were in existence between States of the Centre and of the East of Europe, as a result of the Warsaw Conference. There was, further, a Pan-American Convention, the scheme for the Far East, the model convention for waterways, etc.

He thought that the appointment of a preparatory committee was a necessity. Without such a committee it would be difficult for the Conference to pick its way among all the various inter-governmental documents, for it should be remembered that many of the proposals would prove to be very different from the guiding principles of the Convention of 1912. It was therefore necessary for a very small committee to collect all the material and prepare a memorandum and which could point out the differences and the similarities of the principles contained in the various conventions, and thus provide a ground work for the discussions of the Conference.

He saw with the greatest satisfaction a tendency to transfer the measures applicable to ships, to organised ports of departure, and to the period of the voyage. The Committee knew his opinion in this respect. He had for three years made suggestions in regard to the question.

He thought, therefore, that a short postponement of the Conference would allow these new ideas to be worked out, thus providing a basis upon which the Conference could carry on its work.

Dr. JITTA also thought that it was for the Office international to propose a postponement of the Conference and for the French Government to take a decision. The present discussion, however, was of some use. It showed that there were many new points to be examined. If the Conference was to meet in October, the work of a preparatory committee was all the more essential if it was desired to avoid such difficulties as those which had arisen during the Opium Conference.

Dr. TSURUMI said, with reference to the suggestion contained in the Medical Director's report to constitute a preparatory committee to discuss the basis of the Paris Convention, that he would like to support the suggestion most warmly, since Japan had had no opportunity of presenting her views during the discussion of the draft of the revised Convention. Japan, therefore, was very anxious that such a committee should be constituted which might discuss the questions involved in the draft Convention.

The PRESIDENT thought it was unnecessary to prolong the present discussion, which might be resumed during the present session.

*Visit of the Malaria Commission to Spain.*

The passage of the report of the Medical Director relating to this question was read (Annex 47, Chapter I, 4).

The PRESIDENT expressed, on behalf of the members of the Committee, their gratitude to the Spanish Government.

Dr. LUTRARIO added that the Malaria Commission was in this connection particularly grateful to Professor Pittaluga.

*Epidemiological Information and Statistics on Public Health.*

The chapter of the report of the Medical Director relating to this subject was read (Annex 47, Chapter III).

*Paragraphs 1 and 2 were approved without observation.*

*Paragraph 3: Proposals of the Statistical Group on the Definition of Still-birth.*

M. VELGHE, referring to this paragraph, noted that the report contemplated a discussion of the procedure to be followed in order to obtain a general acceptance of the recommendations of the group. He had submitted the note in question to the competent Belgian administration, which had presented interesting observations with which he desired to acquaint the Committee. He would ask, however, whether the proposals which had been made were to be regarded as final and whether the Committee should only discuss the procedure to be followed in presenting them to the Governments.

Sir George BUCHANAN said he was not clear as to the conclusions to be drawn and the procedure to be followed by the Committee in this matter. Proposals which were designed to make the statistics of various countries comparable appeared to be both useful and desirable, and the manner in which these proposals should be presented to the various health administrations was of the utmost importance. Dr. Stevenson had suggested that a new form of death certificate should be established, and that the Health Committee should make representations to the Governments concerning the importance of a uniform certificate of the cause of death. There were other proposals which might be considered very drastic by certain countries, such as the proposal that the tabulation of statistics should be conducted, not locally, but centrally and under medical direction. In order to advance measures of this importance, it would be necessary to approach the Governments. He would suggest that the most effective procedure would be for the Secretary-General to send the technical reports to the Governments, asking for their observations.

Dr. RAJCHMAN thought that this passage of his report had given rise to a slight misunderstanding. There had been considerable hesitation in submitting suggestions of too final a character in regard to the procedure to be followed, and Sir George Buchanan had wisely insisted on the great importance of the question. The position as regards the report on still-birth and that on joint causes of death was different. The report of Dr. Stevenson and Dr. Rosenfeld on joint causes of death had not yet been approved by all the group and was therefore only a preliminary report. The question of procedure only arose for the moment in regard to the report on still-birth which had been adopted by the whole group. This procedure might be discussed by a Sub-Committee during the present session.

He explained, in reply to a question by Professor Léon BERNARD, that the group in question included both statisticians and *accoucheurs*.

Sir George BUCHANAN enquired whether it was necessary to appoint a sub-committee. Would it not be possible to settle the question at once on its merits ? The experts had given their views in regard to methods of improving statistics. The countries could only give effect to these proposals by domestic measures and Governments must be convinced of their desirability. Could not the Committee at once decide to send the results of its work to the Governments, intimating that the subject, in the view of the Committee, was of importance and asking for their observations?

The PRESIDENT, after further observations from M. VELGHE and Professor Léon BERNARD, said that the question of procedure would be examined by a Sub-Committee presided over by M. VELGHE and composed of Sir George BUCHANAN, Dr. LUTRARIO and Dr. JITTA.

*Paragraph 4 was approved without observations.*

*Paragraph 6.*

Dr. JITTA, referring to paragraph 6, read a communication on the epidemiology of smallpox.

The PRESIDENT noted that the question raised was of considerable interest and he proposed that a preliminary study of it should be entrusted to Professor Jorge, one of the most distinguished specialists on the subject, who would be able to secure any help that was desirable both in the Health Committee and at the Office international.

Professor JORGE thanked the President for his proposal.

*Paragraph 6 of the report was approved.*

*Paragraph 5: Handbooks of Vital Statistics.*

The PRESIDENT opened the discussion on paragraph 5 and invited Dr. Greenwood to make a statement to the Committee.

Dr. GREENWOOD read the following statement on the general scope of the statistical handbooks:

The need of a series of handbooks such as the Health Organisation is now issuing was impressed upon me in two ways.

As a university teacher, I had found that post-graduate workers desirous of investigating some problem of vital or medical statistics were always ignorant of the extent of the sources of information outside their own country, and usually experienced some difficulty in consulting the original publications, since the methods of tabulation are often explained in a part of the volume separated from the tabular matter, and this text may be written in a language which the student cannot read with facility.

As an official of a public health service, and a member of international research committees, I have been still more hampered by a personal ignorance, not, I think, uncommon, of the sources from which particular information may be gleaned, the number of years for which such information is available, and the special difficulties of fair comparison which may have been imposed by variations of statistical systems.

It would not, perhaps, be unfair to say that most medical statisticians know that, for instance, Sweden provides a longer and more accurate series of population statistics than any other country, that the certification of causes of death in Switzerland is particularly exact, that England and Wales have furnished much information on occupational morality, and that in the Netherlands the statistics of infant mortality are peculiarly detailed. It would be equally fair to add that few medical statisticians have much more knowledge than this of the official statistics of any countries but their own.

It therefore seemed to me that the cause of international understanding, and the common utilisation of the data each nation collects and publishes, would be served if we could provide handbooks in French and English which should inform the reader as clearly as possible:

(1) What medico-statistical information the respective countries publish;
(2) How the information is compiled;
(3) Over how long a period the information is available;
(4) What particular class of medico-statistical information is given special prominence by the respective countries;
(5) What well-authenticated features of general or special morbidity or mortality are exceptionally prominent in the respective countries.

Each guide, or handbook, would thus enable its reader, whether a research worker or public health official, at the cost of a few minutes' consultation, to determine whether the statistics of any special country would provide him with the class of information he seeks, and save him from the difficulties which a foreign student consulting for the first time the official documents of a nation is sure to encounter.

The handbooks of Belgium, the Netherlands, England and Wales, and Spain submitted at the present session of the Committee are the first-fruits of this plan.

As the person charged with this responsible work, I have most gratefully to acknowledge both the untiring courtesy and labour of the national experts in correcting the drafts, and the zealous and conscientious work of my colleague, Major P. G. Edge, to whose share has fallen the actual assembling of the material.

It is, of course, inevitable that the first efforts in this field should be imperfect. I hope, indeed, that what has been published is reasonably free from errors of commission, but that there are errors of omission and that the present handbooks fall short of the ideal I had in mind, we, the authors, are the first to recognise.

We must, I think, adopt this rule, viz., that the guides should be written *from the standpoint of the foreigner;* I mean that information should be provided which, to a native, must sometimes appear otiose or even trivial. Acceptance of this, in my view, essential principle must lead to a difference of scale and a non-uniformity of contents as between different members of the series. It is not possible to work by the method of a uniform questionnaire. Thus, in the volumes already issued, more emphasis is put upon their historical evolution in describing the publications of England and Wales than in the study of the Netherlands, while, conversely, the handbook of the Netherlands contains a very detailed account of the procedures in connection with recording the mortality of infancy not found in the other volume. The reason is that foreigners are greatly perplexed by the use in English vital statistics of the same word, *e.g.*, County, in several distinct senses; similarly, foreigners cannot draw full profit from the rich tabulation of mortality in infancy which Holland provides without detailed knowledge of the special features of the system.

Again, when one comes to deal with the official vital statistics of a country, such as Austria, which, over a long period of years, published important memoirs on vital statistical problems in an official journal, it will be necessary to call the student's attention to the contents of these monographs.

A difficulty which these first issues have not perhaps surmounted is to strike a balance between mere enumeration of contents and an essay on the scientific values of the contents themselves. It is possible that the balance has been inclined too much in the former direction. It is obvious, indeed, that considerations of time alone would preclude any full appraisement of the general and special contents of the respective national statistics, but the Committee may perhaps wish the compilers to go rather further in that direction than has yet been attempted.

I am entirely at the disposal of the Committee for any discussion which may be desired on the utility of these volumes, or on the rate of progress which should be made with their production.

The PRESIDENT thanked Dr. Greenwood for his very clear statement. The work which he was doing was one of the most useful tasks of the Committee in connection with statistics, and the Committee was very grateful to him for having undertaken it.

*Paragraph 5 of the report was approved.*

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## THIRD MEETING

*Held at Geneva on Tuesday, April 21st, 1925, at 5 p.m.*

Present: All the members of the Committee with the exception of Dr. Chagas, Surgeon-General Cumming, Dr. Alice Hamilton, Dr. Granville and Dr. Mimbela.

### 133. Causes of the recent decline of Tuberculosis Mortality : Preliminary Report of Dr. Biraud.

The PRESIDENT submitted the report of Dr. Biraud (Annex 51) and its conclusions were read as follows:

This preliminary report is intended first to show whether or not a decline of tuberculosis mortality has actually taken place in several countries. The statistical data presented in Part II establish beyond doubt the reality of this decline. Subsequently, an attempt was made to ascertain whether a comparative international study of statistics was possible and could shed light on the cause of this decline. A report by Professor ROSENFELD shows the possibility of comparing the tuberculosis mortality statistics of certain countries, in spite of difficulties and pitfalls to which he directs attention. It was, meanwhile, deemed necessary to review briefly the opinions held as to the causes of the decline observed. This was done in order to see which of them seemed to explain best the statistical facts and which of the causes mentioned could best lend themselves to statistical analysis and measurement. The necessity for a limitation of the investigation is obvious in a field including practically the whole epidemiology of tuberculosis. After a review of the possible and probable causes of the decline, the following points were retained for consideration as having an important bearing on the problem and, at the same time, being of comparatively easy statistical approach.

(1) *A comparative study of the tuberculosis death rate and the death rate from all causes.* The general death rate reflects the general state of health of the population, which, in turn, is markedly affected by general environmental conditions.

A close relationship between both would tend to indicate the importance of environmental factors and the general state of health on tuberculosis mortality, as compared with direct results achieved by specific anti-tuberculosis measures.

Comparison by ages and sex for the various countries, and at different periods, of the tuberculosis and general mortality would show co-variation (if it exists), both in space and time. This could be easily measured and expressed mathematically.

(2) The specific action of food as a builder of resistance to tuberculosis could be investigated by a comparison in various countries and during various periods of time, the war notably, of the *per capita* consumption of certain staple food products, the co-variation between this food consumption and tuberculosis mortality being an index of the importance of the food factor in tuberculosis mortality:

Necessary data might be obtained from the publications of the Departments of Commerce and Agriculture of various countries and for the cities, Paris for instance, from the toll statistics.

(3) A comparative study of the tuberculosis mortality of infancy and childhood with milk consumption and control, is very desirable because of the many issues at stake.

Comparison could be made of countries where:

No cow's milk is consumed (Japan, Dalmatia);
Milk is not controlled, but is generally boiled before consumption (France);
Milk is neither controlled nor boiled;
Milk is effectively controlled (by herd testing) and wholesale pasteurisation (Denmark, some large American and Canadian cities).

(4) The specific influence of industrial work as distinct from the effect of city life could be, to a certain extent, measured by a study of the differences shown by the male and female tuberculosis mortality rates, according to the extent of industrial employment of the men. It is assumed that in agricultural life men and women share the same home life and largely the same kind of work.

This study should be made specifically by age groups. It should include comparison of the differences existing between male and female rates:
in rural and urban districts;
in non-industrial and industrial countries;
in individual countries before and after the beginning of the era of industrialism.

(Labour and industrial statistics could furnish the necessary data concerning the industrial employment of men, and for recent years, of women.)

(5) A comparative study of the amount of anti-tuberculosis work done and its cost, in countries where the decline has taken place, and in others where it has not taken place, would be a preliminary but essential step in the evaluation of the effect of the anti-tuberculosis campaign.

The most important anti-tuberculosis measures hitherto adopted are concerned with:

(1) Dispensaries;
(2) Hospitals;
(3) Sanatoria;
(4) Associated services (social and visiting nursing services, preventoria, open-air schools, summer camps, health education, and so forth).

A study should be made of the absolute, relative and *per capita* cost of these activities, perhaps restricting the enquiry to dispensaries and sanatoria, as these are the weapons which appear to have been most effective in the past and, at the same time, more susceptible of evaluation and comparison.

The PRESIDENT said that all the members of the Committee desired to thank Dr. Biraud for his admirable report. He invited them first to make any general observations they desired on the conclusions of the report.

Dr. TSURUMI said be would like to thank Dr. Biraud for the very comprehensive report which he had prepared. There were many important points which arose on this report. He would ask first whether it was not advisable to extend to other countries, such as the United States, Denmark, Italy or Australia, the enquiries which had been pursued with such excellent results else-

where. Such an extension of the enquiry would give very useful data for the purposes of comparison and the verification of the conclusions of the report.

As regards Japan, he was not able to give any very accurate information at the moment, but a few figures were available which might throw light on the problem.

The average number of deaths from tuberculosis between 1915 and 1920 over the whole country was 23 per 10,000. The average rate in forty cities with a population of over 50,000 inhabitants was 36 per 10,000. An enquiry had been made in certain villages subsequent to 1918, and as a result of this enquiry it was found that the average rate was 15 per 10,000. It was thus evident that the mortality rate was higher in cities than in the country.

It was further established that the mortality rate was higher in men than in women, and that the mortality was higher among men between the ages of 20 and 25 and among women from 15 to 20. The next highest rates of mortality were found among men between 15 and 20, and among women between 20 and 25.

As regards the conclusions of the report, he entirely agreed with the first. Further investigations might with advantage be made in regard to the second. In considering the connection between malnutrition and the death rate, it was necessary to consider other details, such as general hygienic conditions, etc. As regards the third conclusion, he would like to inform the Committee that the consumption of cow's milk had recently increased in Japan, though it was still customary as far as possible, to feed infants on the mother's milk. Since 1900 the milk supply had been controlled.

Further enquiries might with advantage be made in regard to the fourth conclusion of Dr. Biraud. He would point out that in England, which was largely an industrial country, the mortality rate was declining, despite the progress of industry. Was this due to improvements in industrial hygiene, and what were the essential factors ?

Sir George BUCHANAN complimented Dr. Biraud on his report, and regretted that he had only had a short time in which to study it. He was, however, at once able to appreciate the amount of work which had been put into the report, and would like to express his appreciation of the method in which it was presented.

He had no observations to make on the general text. Five suggestions were put forward at the end of the report. The question arose whether, in the opinion of those who had studied the question and had taken the initiative in suggesting the enquiries, these five questions were the most important, and those on which it was advisable to concentrate any further enquiries which might be made. Personally, he felt it would be well to adopt these conclusions as a basis for discussion, and consider them one by one with strict regard to the question of how the work might be best limited or extended.

M. VELGHE associated himself with the congratulations which had been addressed to Dr. Biraud. He wished to ask one or two preliminary questions. Dr. Biraud had studied the question of the influence of the conditions of industrial employment. Would it not be useful also to examine the influence of conditions of work on those employed in offices ? It had been noted in Belgium that, recently, tuberculosis had attacked these persons in particular. On the other hand, it had been possible to judge of the rapid efficacy of the measures taken to improve the conditions of work and particularly that of separating those who were infected from their companions in their work.

A suggestion had been made that the enquiry should be extended to other countries. Personally, he was generally in favour of intensive rather than extensive enquiries, and he wondered whether it would be wise to extend the present investigation in preference to making a more thorough study of the field already explored.

Professor OTTOLENGHI warmly congratulated Dr. Biraud on his important work. He wished to draw the attention of the Committee to certain points which might well be considered side by side with those suggested by Dr. Biraud in the conclusion to his report.

First of all, it would be very interesting to establish as exactly as possible the relations between the question of habitation and that of tuberculosis, which, up to the present, had only been somewhat inadequately examined and by very different methods.

Further, there was a kind of research which might be undertaken without great difficulty by collecting and examining in detail the fairly numerous documents at present available on the influence of wealth and poverty upon the incidence of tuberculosis. Without attributing a preponderating influence to these factors, it was clear that poverty could not fail to have sufficient influence on the rise and fall of tuberculosis to make it desirable to define that influence as exactly as possible.

There was another question which was not sufficiently taken into consideration by specialists on the subject, namely, the importance of education. The level of general education was certainly of great importance in this connection. It was not necessary, however, to require a high level of education. A criterion such as knowledge or ignorance of the alphabet might be taken as an adequate test in undertaking researches in districts where tuberculosis, did or did not prevail.

Finally, as regards mortality due to tuberculosis, everyone was agreed in recognising that, taken by itself, this factor might sometimes be misleading and that exact information regarding morbidity due to this disease was of the utmost importance. In this direction statistics which were available from countries where it had been obligatory for some time to declare cases of tuberculosis might perhaps furnish valuable information for a study of these two co-efficients, a study which would make it possible to determine more accurately the special features of endemic tuberculosis.

Professor Léon BERNARD said that the Committee would be grateful to the Medical Director and Dr. Biraud and also to Sir George Buchanan, who had so kindly placed at the disposal of the Committee valuable documents to be found at the British Ministry of Health.

Nothing could show more clearly the great interest taken in this investigation than the fact that all the members of the Committee wished to participate in the special Commission. This investigation was of great importance to such a country as France, which had only comparatively recently participated in the campaign against tuberculosis. Those who desired to strengthen the campaign were met by serious financial difficulties, and it was indispensable that there should be precise data in support of it. It was also particularly important that the precise facts in regard to the decline of tuberculosis should be ascertained.

He would, in replying to Sir George Buchanan, venture to point out that the conclusions of Dr. Biraud were in a certain sense purely formal. Dr. Biraud was proposing to continue his investigations on certain points, but it was unnecessary to state that these points did not limit the field of enquiry to be undertaken if further important subjects were brought up during the discussion.

It was essential, as Dr. Tsurumi had pointed out, that the enquiry should be conducted in different countries. This had always been understood. It was necessary to collect documents in all countries able to supply them. If conclusions were to be reached, no relevant source of information should be left out of consideration.

As regards France, Dr. Biraud had worked upon statistics, which related more especially to Paris. The French Committee which was fighting tuberculosis was preparing a report which would be sent to the Secretariat. The statistical position was not very satisfactory for France as a whole, but there was interesting information in regard to certain towns, and especially in regard to certain aspects of the campaign against tuberculosis, aspects which could hardly be studied elsewhere than in France and in Belgium. There was, for example, the question of the measures taken to protect children against tuberculosis.

Professor Ottolenghi had rightly emphasised the necessity of establishing a relation between mortality and morbidity. This necessity arose particularly in the countries where there was no system of compulsory declaration. It seemed, however, impossible to arrive at anything precise on the subject. In support of this contention he would point out that, in spite of the excellent way in which the British statistics were drawn up, Sir George Newman complained in his annual report that the declarations made bore no relation to mortality. Attention was therefore drawn to serious gaps even in the case of a country where statistics were drawn up with remarkable thoroughness and in which the system of compulsory declaration had existed for a long time.

Sir Robert Phillip, the most distinguished phthisiologist of Great Britain, thought that the co-efficient showing the relation between mortality and morbidity might be estimated at 10. The same co-efficient had been reached as the result of a special experiment conducted at Framingham in the United States. This experiment, however, which Professor Léon Bernard had studied on the spot, was not convincing, for the co-efficient was based upon diagnoses; he doubted, however, whether it had ever been generally determined where the diagnosis of tuberculosis began or where it ended. Diagnoses had been admitted at Framingham which would no longer be accepted in France. The establishment of the co-efficient in question, therefore, depended upon a diagnosis which itself varied according to the prevailing medical opinion of the country. In the State of New York, there was a remarkable organisation which had made it possible to check mortality figures against morbidity figures. When doctors received mortality statements which were not in agreement with their morbidity tables, they conducted an enquiry into the cases concerned. In the State of New York, a co-efficient of 5 had been established.

These various statements went to show that even in countries where declaration was compulsory it was impossible to obtain precise information. In these circumstances, it might be asked to what extent this factor should be taken into account.

He noted that a passage in the report of Dr. Biraud (Part I, paragraph 4*b*) raised the question of heredity. Some experts regarded this as a factor of resistance to tuberculosis, others as a factor of predisposition to the disease. In reality there was no more foundation for the one hypothesis than for the other. Conclusive clinical experiments had been made on this subject in France, to wich he would refer briefly.

The Grancher enterprise had been instituted, with a view to separating children from three years of age when they were in contact with tubercular subjects. He had himself effected the separation of children during their first infancy, even from birth, and he had distributed to his colleagues a pamphlet in which the facts observed were set forth. These facts, in addition to their social interests, constituted a scientific argument against the theory of heredity in either sense. The children in question were not hereditarily tuberculous since, when separated from their tubercular mothers from birth, they did not become tubercular. This was not due to the fact that they had become immune owing to heredity, for, if the infants were left in contact with their infected mothers, they inevitably became tubercular. The general mortality among children who were separated before there was any possibility of infection was about 7 per cent. The mortality from tuberculosis of children left in contact with tubercular parents was 82 per cent. It was possible to go even further. When contact with tubercular parents was prolonged owing to the fact that the parents continued to live, the mortality was 100 per cent. These facts had been noted after the necessary researches had been made in regard to children who could not be separated and who had remained in constant and prolonged contact with tubercular parents.

The report said: "If it is true that those tuberculosis patients have more chances of recovery who have a tuberculosis family history..." This assertion was contrary to the observations which he himself had been able to make. The preponderating factor in mortality from tuberculosis was the etiology of the family. The only general factor was infection.

There were other means of enquiry which might be used, for example, the question of nourishment. This question had been given a striking prominence as a result of the war, not only in Central Europe, but also in the invaded districts of France.

The report also referred to the stabilisation of the industrial population (Part I, paragraph 5(4). Mention might also be made of the stabilisation of city life. During researches made in New York it was noted in the Jewish quarters, where general conditions were as deplorable as in the other poor quarters of the city, that there was a district where the mortality due to tuberculosis was less high than in the neighbourhood. Here was a race factor, allied with the stabilisation of city life, which could not be neglected.

The enquiry might also be extended to the relations between tuberculosis and alcoholism. Although there was a generally admitted doctrine on this subject, it was doubtful whether there was any physiological relation between alcoholism and tuberculosis. It had recently been asked whether, from the statistical point of view, the classical comparison between curves showing the consumption of alcohol and curves showing the mortality of tuberculosis were reliable. A purely statistical study of Arnould appeared to invalidate previous statistics, at least so far as France was concerned.

It would be advisable to study very closely the milk question. He did not believe that infection from cow's milk during the first months of infancy, was frequent. Moreover, the Koch theory, which held that bovine tuberculosis was not very injurious to man, seemed to be becoming more and more certain. It was often difficult to arrive at any etiological principle so far as adults were concerned, but it was always possible in respect of small children. It was almost always found that tuberculosis came from the mother, and not from the milk. Conclusions had often been drawn from Japan, where cow's milk was not consumed, and where tuberculosis prevailed among children Even though circumstances had changed, this did not in any way invalidate former experience.

The object of an enquiry into tuberculosis was twofold:

1. To determine whether the disease was really on the decline in a large number of countries.

2. If this were so, what were the factors which determined this decline ? Were they merely due to the evolution of the disease in the human race, or were there external factors, such as direct measures against tuberculosis, or other causes? Conclusions could only be reached by taking all the factors into account, and in default of this the conclusions would be false. A mistake in this matter was more to be feared than actual ignorance.

It was indispensable to come to an agreement in regard to a certain number of criteria which it was desired to discover, and in regard to the importance of various factors, as, for example, direct measures against tuberculosis (dispensaries, sanatoria, etc.). There were two criteria:

(1) The sums expended, and
(2) The date of the establishment of these institutions.

In tracing the curve of the decline of tuberculosis disease and the curve of expenditure, fairly precise information was obtained. This was the same in respect of the food supply — for example, the consumption per head of the population of this or that particular foodstuff.

There was another indirect factor which was extremely interesting, namely, the factor of general sanitation in towns, which had indisputable influence upon all infectious diseases. At the Strasburg exhibition, curves relating to Denmark had been shown indicating in a striking way how the parallelism of the curve showing the decline of tuberculosis mortality preceded that of the application of direct measures, but followed that showing the progress of sanitary improvements more particularly improvements in housing conditions. Professor Ottolenghi had also very rightly referred to conditions of labour and education.

Dr. LUTRARIO said he associated himself with the tribute which had been paid to Dr. Biraud. He supported the proposal to extend the enquiry to other countries. In Italy, a decline in the death rate from tuberculosis in all its forms had been noted, even the death rate from pulmonary tuberculosis, although here the decline was less obvious. This decline was all the more remarkable in Italy, as several circumstances might have led to an increase in the death rate from this disease. The development of a system of sanitary aid and the development of diagnosis had revealed a large number of tubercular patients, and had, in cases of death, enabled the nature of the disease to be ascertained better than had previously been possible. In spite of this, a decrease in the death rate from tuberculosis was noted, though other factors might well have led to its increase, such, for example, as a considerable industrial development in Italy, an increase in the population of certain towns, and emigration. This movement was closely related with the incidence of tuberculosis. An enquiry in respect of emigrants from countries overseas had shown that they brought the disease into prominence or contributed to its development when they returned to their country of origin.

This important decline which had occurred in Italy must have arisen almost solely from the indirect campaign against tuberculosis, the direct campaign being only of recent date. An extension of the enquiry to other countries might throw new light upon the investigation which had been undertaken.

Professor PITTALUGA said he would like to present an observation on the remarks made by Professor Léon Bernard on the very interesting report of Dr. Biraud. A very high rate of morbidity and mortality had been noted in Spain in certain rural districts, and he would like to emphasise the importance of individual studies upon conditions in these districts. Statistics proved that the provinces of Santander and Oviedo were seriously attacked by tuberculosis.

It would be useful to study very specially the districts in question. Dr. Biraud might for this purpose count upon the collaboration of an eminent specialist, Dr. Luis Saye, of Barcelona.

Dr. RAYNAUD observed that several of his colleagues had emphasised the importance of extending the enquiry in Europe. Algeria and North Africa also provided interesting fields of investigation. The races of North Africa were more and more liable to tuberculosis, as was shown by recent enquiries. In the district of Sahara very few cases of individuals reacting to tuberculin were noted. When instead of living in tents, the natives came to live in houses, the number of cases of tubèrculosis increased. This was all the more noticeable on the high table-lands, especially when the native was in close contact with the European. The Jews, on the other hand, who lived apart from the rest of the population, showed great resisting power.

Recent statistics for the town of Algiers (230,000 inhabitants) showed that the death rate from tuberculosis during the last ten years was for Europeans 18 to 20 per 10,000 and for natives 77 per 10,000. It should be added that for several years an emigration to Europe of from 70,000 to 80,000 natives had been noted. These natives lived under deplorable conditions, and on their return to Africa spread the disease among their neighbours. It would be interesting to have the enquiry extended to Algeria.

The PRESIDENT noted that the report of Dr. Biraud (Part I, paragraph 3) excluded the idea that the virulence of the microbe had diminished. He was not certain that a statement quite so categorical could be maintained. Laboratory experiments conducted in Denmark had often shown variations in the virulence of the microbe, above all in the direction of a decrease.

As regards the countries in which the enquiry should be pursued, it would be better, as M. Velghe had suggested, to make intensive researches in a few countries rather than extend excessively the field of the enquiry. Denmark and Norway might be able to furnish valuable information, for these two countries presented an interesting difference between the morbidity and mortality statistics. In Norway, conditions of climate and housing varied greatly from north to south. The increase in the death rate and in the morbidity rate sometimes noted in the larger towns was perhaps due to the development of industrial districts, and the influx of the rural population into the cities.

As regards milk, Denmark might be an interesting field of research. In certain islands, where bovine tuberculosis was very little noted, tuberculosis was fairly widespread among the population.

Professor Léon BERNARD said he would like to draw the attention of Dr. Biraud to another point. It was generally accepted that a decline in the mortality from tuberculosis was observed in almost every country. It would be interesting to know in what countries there was no decline. These countries would provide evidence in regard to the factors to be studied.

Dr. BIRAUD explained that Dr. Rosenfeld had prepared a very considerable work on the tuberculosis statistics of the entire world since the date when these statistics became available. He had shown that in certain countries there was a very noticeable increase, above all in Spain, and that in other countries there was a marked decrease. The enquiry undertaken by the Health Committee should cover at least a country where there had been an increase, and a country where there had been a decrease.

Would it be advisable to study thoroughly the mortality from tuber-culosis in all its forms in a single country, or would it be better to study one particular point, such as the development of city life, for example, in Great Britain and in Norway ? Personally, he thought it would be inadvisable to study one country as a whole for the purposes of comparison with another, but to take a particular point in one country and to compare the results obtained in respect of this particular point with the results observed in another country.

Professor OTTOLENGHI believed that Dr. Rosenfeld had himself made this suggestion, being of opinion that the various countries did not provide data which were fully comparable and that, in consequence, while in one country it was possible to study the relation between labour conditions in factories and the incidence of tuberculosis, it was possible to study better elsewhere the question of tuberculosis in children. Personally, he was generally in favour of this idea. For the moment, however, it appeared to him difficult to reach any conclusion in this respect.

In order to suggest an investigation in any particular direction, it would have been necessary to study in detail the work of Dr. Rosenfeld, which was impossible owing to lack of time. Would it not therefore be better to continue the general discussion, and to leave the task of proposing a precise plan of investigation to those who would be responsible for carrying it out ?

Meanwhile, he wished to point out to Dr. Biraud that there was a school which maintained that the decline of tuberculosis had begun before direct measures were taken to combat the disease. Could not this question be included among those which should be specially studied ?

The PRESIDENT pointed out that it was not proposed for the moment to adopt formally the conclusions of Dr. Biraud. These conclusions were only suggestions intended to enable the Committee to give instructions for a continuation of the research.

Professor Léon BERNARD did not think that the method proposed by Dr. Biraud, which consisted not in studying the facts as a whole, but one particular factor, would be the best method of arriving at the desired result. Such an investigation would only enable greater precision to be given to existing knowledge, for example, as to the effects of industrial work in Great Britain.

Rather than adopt this exclusive method of dealing with certain particular factors, it would be better to make a general study of all the factors in a certain number of countries showing a decline or an increase or a stationary position in regard to mortality from tuberculosis. This study would be facilitated by the work of Dr. Rosenfeld.

He would observe, in reference to a remark of Professor Ottolenghi, that in Great Britain the health administration attributed the decline of tuberculosis rather to a general improvement in

health conditions than to direct measures. Nevertheless, Sir Robert Phillip, at the Conference of Lausanne, had submitted a study based on figures relating to Wales and Scotland, showing that, if this decline had preceded the institution of direct measures, its progress had been increased as a result of them.

Sir George BUCHANAN said he would not venture to assess the comparative effects of direct and indirect measures for the prevention of tuberculosis. There were prudent observers who were prepared to say that the decline of tuberculosis was not exclusively due to "preventive" measures, whether direct or indirect, but to other circumstances — for example, social and economic. If it were difficult to come to any definite conclusion in one country on the relative value of the different factors of decline, it was improbable that any light would be thrown upon the problem by extending the field of enquiry to a collection of countries where additional difficulties would at once arise because their circumstances were entirely different. He did not think that such an enquiry was within the sphere of work or the competence of the Committee. The nature of international enquiries by the Health Organisation of the League should be carefully limited. They should relate only to those questions of medicine and hygiene which required the collection and comparison of material which the League of Nations was in a specially favourable position to obtain, and which might be expected to yield practical results.

Dr. Biraud had submitted five points. Each of these seemed sufficient to occupy an expert for at least two years. It might be more profitable to undertake concentrated investigations under one or two of these headings. He was doubtful, however, whether those investigations would come under paragraphs 2 and 4, of Dr. Biraud's conclusions.

He noted that paragraph one embodied two propositions. It was first suggested that a comparative study should be made of the tuberculosis death rate and the death rate from all causes. It seemed to him, however, a doubtful procedure to take the general death rate as representative of general health conditions. The general death rate included deaths from diseaes which had no reference to health conditions, such as cancer, and itself included deaths from tuberculosis. The second proposal, however, for a comparison by ages and sex, might, on the other hand, be very profitably made. Certain very striking facts has been brought out in the course of the enquiry concerning the incidence of tuberculosis as regards the sexes. More particularly, there was a striking difference between the death rates as between males and females in the Netherlands and Great Britain. This was a striking statistical fact which was worth further study. If the propositions were taken one by one, he would suggest similar restrictions or definitions of each in turn.

Dr. BIRAUD observed that the second paragraph of conclusion 1 was only an explanation of the first paragraph. A comparison between ages and sexes merely went to show that there was no parallelism between the diminution in general mortality and in mortality from tuberculosis. Several authorities alleged that the latter was only an aspect of the decrease of general mortality. An enquiry might, however, show that mortality from tuberculosis had decreased much less quickly than general mortality. As all the factors of environment had an influence on general mortality, it might be possible to make a kind of distinction between the influence of direct measures and the influence of general measures.

Dr. LUTRARIO drew attention to a technical detail. It might be useful to establish the rate of mortality from tuberculosis by comparing the number of deaths for persons of different ages with the number of the population at those ages. It was possible to be led seriously astray in comparing mortality from tuberculosis with general mortality.

Professor PITTALUGA said he would like to raise a question of procedure. The present discussion concerned details which were rather the concern of a special Commission. The report of Dr. Biraud was a work of the Health Section. In future, the general problem of tuberculosis should be dealt with according to the customary method. There would be a general discussion on the work done by the Health Section in accordance with the instructions of the Committee. Would it not be well to adopt now for this question the method already adopted for other questions and to appoint a Commission on tuberculosis, with the addition of experts if the Medical Director thought fit. Suggestions for a Commission on tuberculosis had already been made.

Dr. RAJCHMAN reminded the Committee that in October last it had decided to ask the Secretariat to make a preliminary study of the question whether it was necessary to undertake a thorough enquiry into tuberculosis. A Tuberculosis Commission had been set up under the Chairmanship of Dr. Tsurumi. Dr. Biraud had presented in his report the results of the preliminary work of the Secretariat. The present discussion had gone into such detail owing to the fact that the members of the Committee themselves had desired that the report of Dr. Biraud should be discussed not by a special Commission but by the full Committee.

The Secretariat had presented the preliminary study which it had been instructed to make. The question arose whether it should now prepare a scheme for dealing with any particular point to be submitted to the Committee in October, or whether it should immediately undertake the investigation of any particular point.

Professor PITTALUGA paid a tribute to the work of Dr. Biraud and to the way in which the Health Section had interpreted the wishes of the Health Committee.

Dr. CHODZKO thought, with Professor Pittaluga, that the discussion should be continued in a special Commission. The Medical Director, however, was asking for instructions in regard to the plan of work. He would emphasise the importance of studying the question of preventive measures, such as sanatoria and dispensaries or a combination of these two institutions. Although attention had been drawn to a decline of tuberculosis, the fact remained that mortality from tuberculosis was higher than from any other infectious disease. What should be done in order

to combat this disease ? Such was the essential object of the work of the Committee. He thought that it would be more advantageous to continue epidemiological researches than to conduct an investigation into professional and urban conditions regarded as etiological factors, the significance of which had been known for a long time.

Professor Léon BERNARD reminded the Committee of the origin of the present investigations. The Committee had been asked by Dr. Tsurumi to study a large number of points relating to tuberculosis, to the causes of mortality from the disease, and to the measures to be taken for fighting it. The Committee, in view of the extensive character of the subject, had felt it necessary to put on one side certain aspects, as, for example, the clinical and therapeutical aspects, and had confined itself to researches of a biological character on tuberculin, having a certain relation with serological work, and to epidemiological questions which included a study of the decline in mortality from tuberculosis and the factors to be noted in this decline. The Committee had, moreover, been asked to deal with the latter question by the " Union internationale contre la Tuberculose ", and by the Government of the Kingdom of the Serbs, Croats and Slovenes.

The discussion which had taken place, although it was impossible for any precise conclusion to be formed, had been indispensable. It would now be well, however, to return to the method suggested by Professor Pittaluga, and to entrust the work to the Tuberculosis Commission, which would not take any decision without reference to the Committee.

Dr. RAJCHMAN reminded Dr. Chodzko that it was very important to ensure that the investigations to be undertaken should proceed at once in the right direction. In order to frame a model scheme for the campaign against tuberculosis, it was necessary to elucidate the question of the decline in the mortality rate from tuberculosis, a point which was still the subject of controversy. The same applied to the factors in this decline, supposing that such a decline existed. It was necessary, therefore, first of all to establish the facts, and then to undertake an etiological enquiry, in order to throw light on the data obtained. He would draw the attention of Dr. Chodzko to conclusion No. 5 in the report of Dr. Biraud, which, properly speaking, constituted the starting-point for prophylactic investigations.

Professor Léon BERNARD referred to the terms of the resolution adopted on October 2nd, 1924, in regard to the Tuberculosis Commission. It was in this Commission that the discussion should be continued.

The PRESIDENT thought that, in conformity with precedent, the Tuberculosis Commission might be composed of the bureau of the Health Committee, in addition to Dr. Tsurumi and including the two Vice-Chairmen who had left office. The Commission would then be composed as follows: Sir George BUCHANAN, Surgeon-General CUMMING, Dr. LUTRARIO, Professor Léon BERNARD, M. VELGHE, and Dr. MADSEN.

The Commission would be under the Chairmanship of Dr. TSURUMI.

*The Committee decided,* on the request of Sir George BUCHANAN, *that he might be replaced by Dr. Greenwood, and accepted also* Dr. Lutrario's request *that he might be replaced by Professor Ottolenghi.*

*It was decided that the Commission should meet on April 24th, at 3 p.m.*

134. **Interchange of Sanitary Engineers.**

The draft resolution in regard to the interchange of Sanitary Engineers was read as follows:

> " The Health Committee, taking into consideration the repeated requests that have been made for an interchange of Sanitary Engineers, and desiring no longer to delay the organisation of such an interchange:
>
> " 1. Decides that an interchange of Sanitary Engineers shall take place in 1926;
>
> " 2. Requests the Medical Director to undertake immediately a study of the conditions under which this interchange should take place and the means of bringing it about."

Sir George BUCHANAN asked whether the Committee would have an opportunity of adopting the resolutions in their final form.

The PRESIDENT replied in the affirmative.

*The resolution was approved.*

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## FOURTH MEETING

*Held at Geneva on Wednesday, April 22nd, 1925, at 10 a.m.*

Present: All the members of the Committee, with the exception of Dr. Chagas, Surgeon-General Cumming, Dr. Alice Hamilton, Dr. Granville and Dr. Mimbela.

135. **Examination of the Report of the Medical Director on the Work accomplished by the Health Organisation since the Third Session of the Committee** (Continuation of the discussion.)

*Work arising out of Activities of the Several Commissions of the Health Committee: Work of the Malaria Commission.*

The relevant passage of the report of the Medical Director was read (Annex 47, Chapter IV, Section 5).

Dr. LUTRARIO, Chairman of the Malaria Commission, made the following statement regarding the work of that Commission since the last session of the Health Committee:

During the third session of the Health Committee in October last I had the honour, on behalf of the Malaria Commission, to give you some information regarding the task with which we had been entrusted.

The Commission had just finished the extended mission of investigation which it had undertaken in the Balkans, in Russia and in Italy.

The Health Committee was then informed of the great interest which this event had aroused in public opinion and among the Governments of the countries which were visited. The proof of this was afforded not only by information given to us by certain members of the Commission but also by the fact that the Governments were now applying to us for assistance in directing the campaign against malaria. Several Governments had sent requests to the Health Section to the effect that courses should be organised with a view to improving the education, competence and skill of the young specialists in malaria in order that they might become effective champions of preventive measures against that disease. The need for such action was felt everywhere, as there had been an almost universal and considerable increase of the disease, which had become much more severe both in regard to its incidence and the intensity of its more malignant forms.

The Health Committee had received the considerable material which had been collected and which was dealt with in twenty monographs. The abundance of this material and the great number of impressions, data, criticisms and estimates collected in the regions where the campaign had been conducted prevented the Commission from drafting a report on the fundamental aspects of the problem. The Commission confined itself to a short provisional statement of the facts observed and an account of the activities developed by the Commission. It reserved for a later date the work of drafting a final report which would deal with the conclusions reached and the factors necessary for an elucidation of the problem.

The printed document which you have received (Document C.H. 273) is the second report to which I have alluded. This report, so-called final, is not such a report as the one which we think of drafting before long, but one, however, which goes much further than the first report and constitutes some real progress.

It consists of two parts: (*a*) a general part which applies to all countries; (*b*) a special part consisting of individual reports for each of the countries visited.

The general part was, in the first instance, drafted by our energetic Secretary, Dr. Lothian. It has been revised and elaborated paragraph by paragraph by a Drafting Committee consisting of Dr. Nocht, Professor Pittaluga and Colonel James. This very remarkable work deserves to be brought to the notice of the Committee.

The general part of the report was examined thoroughly phrase by phrase, with the assistance of the Drafting Committee, by the full Commission which was specially convened for the purpose. Twelve persons were present, including members of the Committee, experts and correspondents. All showed a good-will, a spirit of conciliation, and an industry which were above all praise. This part of the report was unanimously adopted, and the responsibility of the Commission as a whole is involved.

The special part of the report, on the other hand, consists of a few sections, the responsibility for which belongs exclusively to those who drafted them. The authors have left to the Chairman and the Drafting Committee entire freedom to make any small modifications of form which may be deemed necessary.

The document as a whole is a valuable and considerable source of information and of the factors to be taken into consideration. It is, in any event, the first official document of an international character prepared on the subject.

The general chapter of the report, in which the views of the Committee as a whole are conveyed, consists of two parts: (*a*) One part is, if I may venture to say, both analytical and synthetical at the same time. It shows the conditions peculiar to each of the countries visited in relation to all the aspects of the malaria problem. These aspects include orography, hydrography, the presence of anopheles and the various species of anopheles, social factors (housing, food supply, public administration, migration, general health conditions, etc.), epidemiology (incidence and forms of malaria), laboratory researches, organisation of the campaign, the questions of staff, apparatus, finance and legislation, propaganda, the method of pursuing the campaign, quinine, measures against mosquitoes, drainage works. In brief, the report contains a synoptic table, strictly drawn up, in which, as briefly as possible, the conditions and factors of the malaria problem, direct and indirect, peculiar to each country visited may be found. (*b*) The other part which precedes this part consists of a brief outline of final and general impressions which are given as summary conclusions and must not be regarded as final propositions in regard to which no further revision is possible.

The Commission thought that it would be premature to attempt to lay down general final conclusions at a time when there were still other countries to be visited and new sources of information to be investigated. Moreover, the mandate entrusted to me has not yet expired.

To all this must be added the different opinions held of the various methods of campaign which are now being more or less carried on in the various countries. These differences of view make it necessary to observe the greatest prudence in laying down general final conclusions.

Our hesitation in arriving for the moment at general conclusions is due to a considerable extent to an appreciation of the fact that malaria is a problem indissolubly connected with local conditions, geographical, orographical, hydrographical, etc. — a fact which implies that the method

of campaign varies from place to place, a system adequate in one place not being adequate in another.

Nevertheless, among the variety of factors, there are some which are found universally wherever malaria exists: those invariable factors are the persons suffering from malaria and the mosquito.

On these two factors our preventive efforts must be concentrated. These efforts will aim: (*a*) at a diminution of the number of infected persons (source of infection); (*b*) at a diminution of the number of mosquitoes (agents of transmission).

In practice these two kinds of measures will include: (*a*) an improvement in the health of the human subject by means of quinine; (*b*) small sanitary operations and measures against the anopheles.

The Commission, while feeling it necessary to proceed with the greatest reserve as to the general measures against malaria, considers that an exception should be made in regard to the improvement in the health of the human subject and in regard to the small sanitary operations. The Commission must draw attention to the measures which appear to have passed beyond the stage of criticism and experiment and which may be recommended for general adoption, both from the practical and economic point of view, and as being calculated to yield appreciable results.

In order to effect a general improvement in the health of the human subject in a rational manner, it is necessary to seek out and examine the persons who have contracted the disease and those who harbour the parasite, and to treat them systematically with quinine and its derivatives. The treatment must be prompt, energetic, regulated according to the condition of the sick person, and prolonged even after the clinical cure is effected.

Small sanitary operations and measures against the anopheles may give results if applied in limited regions, if well chosen and studied and, above all, if directed particularly against the breeding grounds of the mosquito.

Preventive measures by means of quinine can only be recommended for a fixed period with a definite object in view and confined to groups of persons subject to strict control.

These are the general statements to which the Commission limits itself at the present moment. They are not intended to put other measures into the shade or in any way to belittle the importance of the other measures which have been recommended. This field remains reserved to be dealt with in the near future, when the Commission is in possession of further factors which may enable it to assign to each of the other measures their real value in relation to the health results which may be realised and to the economic efforts which they may entail.

*General Measures for Improvement in Health Conditions.*

The Commission has, on the proposal of Professor Ottolenghi, proposed that experimental enquiries should be made in order to establish the value which can be attributed, from the health point of view, to large sanitary works, as well as to the Dutch canal systems. This investigation is extremely opportune and may lead to definite conclusions in regard to the results, both economic and sanitary, which may be achieved by works of this kind. These enquiries would be undertaken in Italy and in the Netherlands.

It is certain, however, that in a number of places where these two measures — namely, general improvement in health measures and small sanitary works — have been carried out rationally malaria has been successfully subdued. The first of these measures tends to diminish the source of infection and the other to control its transmission.

When, by means of these two measures, the critical point of equilibrium between the two malaria factors is passed, the disease is at once seen to decline. I use the word " decline " and not the word " disappear ", as disappearance is an extremely complex phenomenon which depends not only on health factors, both general and special, but also on social and economic factors, which we cannot always control in such a way as to eliminate the scourge.

*Quinine.*

The mandate entrusted to the Commission did not only cover the incidence and epidemiology of malaria. There was also a third point — namely, that of quinine, its production, manufacture and distribution. The quinine problem, regarding which we have obtained very important monographs from our Committee of Experts, has always been one of quantity, or, if you will, of price, as compared with the needs of the malaria patients.

In order to make an attempt to obtain a practical solution of the problem in the future, the possibility of summoning an international conference on the question has been contemplated. This proposal, coming from Dr. Stampar, has been accepted unanimously by the Commission and was taken into consideration by the Health Committee, though no decision has as yet been taken regarding the opening date of the conference (Minutes of the Session of the Committee held in May 1924, page 28). Apart from a certain hope based on the possible convocation of the conference, a possibility which has not yet been realised, weremain in the same position as we were before.

There is a striking disproportion between the total quantity of quinine available and the real need for the drug — a disproportion which is greater than it appears to be owing to the very high price of quinine. In order to estimate this disproportion it should be remembered that malaria, which is a most remarkable factor in inducing inability to work, shows, on the other hand, a very small death rate — between four and five per thousand persons attacked by the disease. I am speaking now of malaria as shown from death certificates. If we try to calculate the number of sick persons corresponding to the known number of deaths, we shall find an altogether unexpected proportion.

We know with sufficient accuracy the world production of quinine, which is in the neighbourhood of seven hundred tons a year, including the quinine which might be extracted from a quantity of bark not yet exploited, according to the information given by Professor Swellengrebel.

From this we must deduce the fact that a great number of persons afflicted with malaria cannot be treated, owing to a lack of quinine. What is to be done ? For the moment there are only two methods to be followed — avoid waste and use to the full all the cinchona alkaloids.

In connection with the second point, a detailed investigation into the secondary alkaloids is contemplated (Annex 52). The following is the plan which has been proposed.

Experiments will be conducted in five different countries regarding cinchona and its constituent alkaloids. These experiments will be carried out in clinics, hospitals and dispensaries, under the competent direction of qualified specialists. The countries chosen will be Algeria, Italy, Roumania, the Kingdom of the Serbs, Croats and Slovenes and Spain. The reports of the experiments will be drawn up in model forms similar to those already used by the Medical Research Council of London but with slight changes of detail.

A Sub-Committee of our Commission will be instructed to supervise the experiments in order that they may be strictly comparable, allowing at the same time the necessary latitude to the experimenters to widen the field of their research if they so desire.

The Sub-Committee will be composed as follows:

Dr. NOCHT (Chairman), Colonel JAMES, Professor MARCHOUX, Professor PITTALUGA, Professor OTTOLENGHI.

The Sub-Committee will have the right to enlist the services of a clinician.

It will not be necessary for the Sub-Committee to meet frequently. Part of its work can be carried out by correspondence, through the intermediary of the Secretariat, in order that that body may always be kept informed of what is being done.

Naturally, the products from which the experiments will be made will come from a single source and will be properly controlled in order to guarantee their purity and their chemical composition.

*Future Activity.*

The Committee will remember that at its last session it approved a scheme relating to a tour of investigation in North Africa (Algeria, Tunis and Morocco). It has since then been found preferable to postpone this tour for the moment and to consider the possibility of carrying out a tour in the Levant, which would make it possible for members of the Malaria Commission to investigate the remarkable work accomplished in Palestine and Syria. Moreover, such a tour would facilitate a further visit to Anatolia.

The work in question is very simple and is based on two fundamental measures — improvement in the health conditions of the people and smaller sanitary works. It appears that the results obtained are quite considerable.

The Commission proposes, therefore, in agreement with the mandatory Powers and the local administrations, to send a group of certain of its members to visit these countries. They will return *via* Sicily, where they will spend a short time. In the summer, probably about mid-August, the Commission proposes to visit Spain for four weeks. The Spanish Government has offered its hospitality through the intermediary of its representative on the Council of the League. This kind offer from the Spanish Government is due to Professor Pittaluga, who has drawn the attention of his Government to the question of the tour, with the result that the invitation which I have just mentioned has been offered.

*Co-ordination of Studies in Malaria.*

You have already learnt from the report of the Medical Director of the plan to carry out a course of studies of a month or six weeks' duration in the three institutes of tropical medicine under the direction of Dr. Nocht in Hamburg, Dr. Balfour in London and Dr. Brumpt in Paris. Parallel courses of instruction will be given to young malariologists or doctors taking up anti-malarial work. These courses of study, the programme of which is being prepared, will be followed by periods of two months' practical work. With this object the participators will go to countries where an energetic anti-malaria campaign is being carried on. Each student will visit two or three countries, such, for example, as Sardinia, Calabria, Dalmatia, Macedonia and Palestine and, later on, perhaps, others.

Thus the various aspects of the problem and the different methods of solving it will be shown to the persons taking the course.

*Albania.*

The very full report on Albania submitted by Dr. Haigh and drawn up after his enquiry, which was carried out by invitation of the Government of that country, has been considered by the Commission, more especially in regard to its conclusion and recommendations for action. The report has been analysed and adopted and is submitted to the Health Committee for its approval. The Malaria Commission desires to congratulate Dr. Haigh on his admirable work.

*Corsica.*

As a result of the request from the French Government, asking for the appointment of experts to conduct an enquiry into the malaria conditions prevalent in Corsica, it has been decided that two French members of the Commission — Dr. Raynaud and Professor Marchoux — will conduct this enquiry, which was carried out this month. The report of the two experts is expected shortly.

*Turkey.*

A similar request from the Turkish Government has also been considered by the Commission. While awaiting certain information from Angora, it decided to take no action but to make a

provisional collection of the necessary documents. Document C. H. 275 contains the material which has so far been collected on the subject.

*Participation in the International Malaria Congress (Rome, October 1925).*

It was proposed that the Health Organisation (Malaria Commission of the Health Committee) should be represented by its Chairman (Dr. Lutrario), who would give a brief account of its activities, by Dr. Nocht, Professor Pittaluga and Colonel James, who would submit brief practical reports on subjects chosen by themselves at a future date. In addition, Professors Marchoux and Ottolenghi and Dr. Swellengrebel, who will attend the Conference as representatives of their respective Governments, will also be considered as associated with the delegation of the Health Organisation.

*Corresponding Members.*

In order to reinforce and enlarge the Commission, it has been decided to submit to the Health Committee for its decision the following names of experts to act as corresponding members: Colonel Christopher (for British India), Professor Brumpt (for France), Dr. Darling (for the United States) and Dr. Basso (of Smyrna), who will act as Medical Correspondent for the Near East.

It has given me great satisfaction to give you an account, though somewhat compressed, of our work.

The hopes to which I gave expression regarding the results of our work are beginning to be realised. You assigned us a large task, but we will try to carry it out with the firm resolution not to prove unworthy of the confidence which you have placed in us.

What has already been done is an augury for what remains to be done, until we have attained the desired end, which we shall strive to reach with the same good-will and the same continued activity as we have hitherto shown.

The PRESIDENT thanked Dr. Lutrario for his extremely full and interesting statement. The Committee much appreciated the work done by the Malaria Commission.

Professor PITTALUGA desired to give certain additional information in regard to the proposed visit of the Malaria Commission to Spain. The visit was planned to take place during the second half of August and the beginning of September of the present year. The Commission would begin its work at San Sebastian, and would then move to Madrid to investigate the various health institutions in the city and the small centres of malaria in certain neighbouring districts. It would then proceed to Estramadura, which was full of very grave and interesting problems in connection with malaria. The Commission would be given an opportunity of seeing the manner in which the authorities were dealing with these problems. It would then visit certain rural districts of various provinces, and thence to Andalusia (Seville and Cordova). It would then study the incidence of the disease in the rice fields of Valencia and in Tortosa, from whence it would proceed to Barcelona and examine a very interesting small centre of malaria in the neighbourhood. He hoped that as a result of this tour the Malaria Commission would obtain a fairly complete idea of the problem in Spain and the efforts being made there.

He also desired to suggest the investigation of a disease which was becoming of great importance in Spain — leishmaniosis or "kala-azar". Kala-azar was apparently endemic in Spain.

In conclusion, he hoped that as large a number as possible of the members of the Malaria Commission would be able to visit his country.

Sir George BUCHANAN said that the work of the Malaria Commission was most striking and gratifying. He had formed the impression that the tour made by the Commission in Eastern Europe had been a particularly arduous one, and persons who might be inclined to think that such frequent tours of investigation in foreign countries were more a pleasure than a hardship were mistaken. He noted that the report submitted by the Malaria Commission was an *interim* report (Document C.H. 273). In view, however, of its great value and interest, he very much hoped that it would be published.

Dr. RAJCHMAN informed Sir George Buchanan that the report would be published within a week.

Sir George BUCHANAN replied that this was most satisfactory, as the report showed what point the work of the Commission had reached. The report summarised excellently the situation in the countries visited by the Commission, and it gave the kind of advice needed by several countries.

The investigation of cinchona alkaloids was of the very greatest importance. The Malaria Committee of the Medical Research Council had made a special effort to submit a report in time to be of use in the international enquiry of the Malaria Commission.

He asked, as regards the arrangements made for the tours to be undertaken by the Commission in the following year, whether, if they were all approved immediately, the Health Committee might not be hampered in other investigations by reason of the cost of these tours. Was there a sufficient provision in the budget to cover both these tours and any undertaken by other Commissions of the Health Organisation ?

Dr. JITTA stated, with regard to the lack of quinine, that he had received a letter from the Director of the Dutch Quinine Factory stating that, were the consumption of that drug to increase, production could be increased by 200 or 300 tons. The price of quinine had been tripled since the war owing to various circumstances. At present it was about 47 florins a kilo retail, though it was cheaper wholesale. Cinchonine was about half the price of quinine.

Dr. LUTRARIO thanked the President and the Committee for their favorable reception of the work of the Malaria Commission and said that the Committee would have to pass resolutions

concerning: (1) the visit to the Levant and the Eastern Mediterranean; (2) the additional corresponding members; (3) the enquiry into the alkaloids of quinine; (4) the mission to Corsica (request of the French Government); (5) education of young malariologists; (6) representation of the Malaria Commission at the International Conference at Rome; (7) request of the Turkish Government; (8) the report on Albania; (9) the scheme for the enquiry as to the value of large sanitary works as effective means of combating malaria. This proposal had been put forward by Professor Ottolenghi and had also been suggested to him as a result of the differences of opinion between malariologists on the subject. The question was one of great economic and social interest.

For a long time the idea had been prevalent that sanitary works in themselves, or accompanied by agricultural works, were sufficient to destroy malaria. Now, however, it had been noted that in a good many instances the anopheles did not seem to grow less as a result of such works and that sanitary measures therefore seemed to have only an indirect effect upon the disease because it bettered the conditions of life in districts where they had been carried out. Further, sanitary works were usually very expensive. It would therefore be of the greatest interest to form an accurate estimate of their real use. With this end in view, Professor Ottolenghi had suggested the establishment of a centre of investigation at Emilia, in Italy. This was a district where the various systems of sanitary works on a large scale were in existence or were being constructed. In other parts of the district there were areas notoriously infested with malaria.

It would be very easy to choose a small town in this district situated in the middle of the areas to be investigated and provided with a good hospital where it would be possible to reserve beds and establish a dispensary and a small laboratory for the various branches of research work.

Dr. Swellengrebel had proposed that similar investigations should be undertaken in the Netherlands, where sanitary works on a large scale were about to be started. Useful information could be obtained, the value of which could be increased by comparison with the information obtained in Italy.

The Malaria Commission had approved these various proposals, which Dr. Lutrario accordingly submitted to the Committee.

In regard to the point raised by Sir George Buchanan, Dr. Lutrario thought that it was essential for the report of the Commission to be published. The Italian Minister for the Interior, for instance, was most anxious to see a copy of it.

In reply to Dr. Jitta, he expressed the hope that, once the investigations into the alkaloids of quinine had been finished, it would be possible to double the quantity of materials used in the campaign against malaria.

Dr. RAJCHMAN, in reply to the point raised by Sir George Buchanan concerning the financial side of the tours of investigation carried out by the Malaria Commission, said that the final plan of that Commission's work had not yet been definitely drawn up, but that the estimates had been prepared and he thought they were sufficient. The plan could alwaysbe modified at a later date.

Sir George BUCHANAN asked whether the League had supplied quinine to Albania or had merely distributed it.

Dr. RAJCHMAN explained that the League had not supplied quinine to Albania. Its action had been the result of the following circumstances. There had been a famine in Albania the relief of which had been entrusted to the League. The High Commissioner for the relief of the famine, on the completion of his work, had found that there remained over a small sum of money which he had proposed should be used to supply quinine. This proposal had been adopted, and Dr. Haigh, who had at the moment been conducting an enquiry into general health conditions in Albania, had supervised its distribution and had given details of this work in his report (Annex 52 a).

Professor CANTACUZÈNE said that, as representing the League of the Red Cross Societies, he was authorised to state that, in the matter of health propaganda, those Societies were entirely at the disposal of the League.

Sir George BUCHANAN asked whether the Health Organisation was in touch with the Greek Refugee Settlement Commission. He understood that the risk of malaria in those districts in which the refugees were being settled was very great.

Dr. RAJCHMAN said that there was no direct contact between the Health Organisation and the Greek Refugee Settlement Commission. The Chairman of that Commission, however, Mr. Howland, fully realised the importance of the malaria problem. He was proposing to submit to the Health Organisation in the near future definite proposals, which Dr. Rajchman hoped would be placed before the Malaria Commission at its next session. The problem in those districts was not so grave as it had been.

On the proposal of the PRESIDENT, *the Committee decided to send the report of Dr. Haigh on Albania to the bureau for examination.*

Dr. GILMOUR said that, as regards the survey which he had carried out in Persia, he had made certain recommendations which had been submitted to the Council of the League and to the Persian Government. The Persian Government was quite willing to take them into consideration but was not willing to spend any money on the sanitary improvement of Persia, since the state of the budget did not permit it. Were the Health Committee, however, to invite a Persian doctor to come to Europe in order to see the European systems of public health, Dr. Gilmour thought that the effect in Persia would be very considerable. On his return the Persian doctor

might find it possible to set up a school in Teheran for the training of the medical profession in general matters of health organisation.

Sir George Buchanan had thought that a visit by a Persian doctor to Europe would not be of great use. Dr. Gilmour was unable to agree, for, in his view, the Persian doctor would find much which would be of the greatest use to him, though he should adjust his focus by investigating systems of public health in Palestine or Morocco on his way home.

In Persia it should not be difficult to prevent the spread of infectious diseases, since there were no railways in the country and passenger control at the frontiers would be perfectly possible.

M. VELGHE asked whether there was a large number of Persian doctors and whether they were competent. He was under the impression that Persia had no medical organisation properly so called.

Dr. GILMOUR replied that the Persian doctors did not possess sufficient knowledge to undertake a malaria campaign. There was, however, a sanitary council at Teheran composed of the foreign doctors attached to the legations of the Powers. These were first-class men and could guide the malaria campaign.

*It was decided that Dr. Gilmour's report should be examined by the bureau.*

*The proposals of the Malaria Commission were unanimously adopted.*

136. — **Proposed Investigation of Leishmaniosis.**

Professor PITTALUGA desired to raise a question, as Dr. Jitta had done on the previous day, in regard to research into certain diseases. Professor Pittaluga was anxious for the Committee to undertake the investigation of leishmaniosis. This was a problem of great importance in Spain and for all the Mediterranean countries. Nearly two hundred proved cases had been discovered on the Mediterranean littoral and sixty-eight cases in the central provinces of Spain. It seemed that the disease was endemic, and Spanish medical opinion was convinced that it was confronted with a very interesting problem, the significance of which was far deeper than was indicated by the actual number of proved cases which had so far been notified with actual demonstration of the parasite by spleen puncture. The research already carried out in Spain and the gravity of the problem would enable the Health Organisation to investigate it very fully. Members of the Spanish medical profession were themselves investigating the question of germ carriers, the possible relation between kala-azar and Oriental sore and the relative prevalence of the disease among children and adults.

The investigation of this disease could be carried out not only in Spain but also in all countries bordering on the Mediterranean, but a beginning should be made with Spain, because the conditions of investigation were most favourable in that country, particularly from the epidemiological and even the etiological points of view. Attention was directed now towards the *Phlebotomus* rather than the flea, but Professor Pittaluga did not wish to dwell for the moment on that aspect of the problem.

Dr. RAYNAUD supported Professor Pittaluga. A fairly large number of cases of kala-azar occurred in North Africa and in Tunis as well as in Algeria and Morocco.

It was easy to mistake this disease for malarial cachexia, as had been done several times. In regard to Oriental sores, cases were no longer confined to the desert region (Biskra), but were also found on the sea-coast. Dogs were frequently attacked with kala-azar, and the constant presence of dogs in the native dwellings contributed to the spread of this form of leishmaniosis.

An enquiry into kala-azar and Oriental sore in the basin of the Mediterranean would be of very great value.

Professor CANTACUZÈNE asked whether dogs were reservoirs of the virus, since that fact had been disputed.

Professor JORGE said that a similar problem had arisen in Portugal, where it had been closely investigated. He would place at Professor Pittaluga's disposal the Portuguese work on the subject. Leishmaniosis was a very important disease and was prevalent all over the Mediterranean regions, even outside the basin. He warmly supported the proposal of Professor Pittaluga, the more so as he had intended to raise the question at the next session of the Office international.

Sir George BUCHANAN said that the proposal was a very interesting one, but it confirmed him in his opinion that questions of this nature were better discussed in the Committee which had a larger number of members from different countries. Kala-azar had been most carefully studied in the British colonies and India. He thought, therefore, that the Health Committee might ask the Office international at Paris to discuss such subjects. He suggested that Professor Pittaluga should submit a memorandum to the Committee which would be transmitted to the Paris Office for discussion. The question could then be fully discussed by the Health Committee at its next session. If this were not possible, perhaps Professor Pittaluga could distribute his memorandum to the members.

Dr. RAJCHMAN proposed a compromise to meet the views both of Sir George Buchanan and of Professor Pittaluga. The problem of leishmaniosis was a very grave one, and it was being investigated in certain parts of the world, notably in India. It was obvious that Professor Pittaluga desired a detailed scientific investigation. Could he not, therefore, together with those members of the Committee who supported his proposal, prepare a detailed preliminary memorandum for discussion by the Health Committee in October, together with plans for the proposed investigation ? In the meanwhile, the Health Organisation might get into touch with the Indian medical authorities and obtain information as to the result of their researches. A useful precedent for this was to be found in the way in which the investigation into quinine alkaloids that had been conducted by the Medical Research Council of London had been of assistance to the Health Organisation.

Sir George BUCHANAN thanked Dr. Rajchman for his suggestion. He reminded the Committee, however, that the Public Health Commissioner for India would be in Paris the following week for a meeting of the Perman ent Committee of the Office international and that the view taken by the Indian Government was that health matters in which it was interested should be discussed by the Office international, at which it had a representative. If Professor Pittaluga's proposal were submitted to the Office international, it could be asked to put the question of leishmaniosis on its programme.

Dr. RAJCHMAN fully agreed that it would be impossible for the Committee to undertake a world enquiry into leishmaniosis. That enquiry would have to be confined to Europe. It would, however, be very interesting if it were possible to have the results of the investigations conducted in India. For this it would be sufficient, he thought, to communicate with the medical authorities of the Indian Government. The presence of the Indian Sanitary Commissioner in Paris would be very useful, since he was fully conversant with the nature of the problem.

Professor Léon BERNARD supported Dr. Rajchman's proposal. It was impossible for the Health Committee to undertake the investigation of a large and important new question, because it had hardly time to do so adequately. It should therefore ask Professor Pittaluga and Dr. Raynaud to undertake such preliminary enquiry as might be necessary. The Office international would be called upon to give its opinion because the resolutions adopted by the Health Committee were submitted to it.

Dr. RAYNAUD thought that the investigation should be limited to Europe, and, if necessary, the views of Indian medical opinion could be obtained by correspondence.

Sir George BUCHANAN said that with this limitation he quite agreed to the proposal. If the Committee had been called upon to decide immediately on a general enquiry it would have been impossible for him to have voted in favour of it. It would be premature to undertake such an enquiry without full information. A preliminary report, however, from Professor Pittaluga would be very useful and the Committee could decide at its next session how much further to proceed with the question.

Professor PITTALUGA thanked the Committee for the interest shown in his proposal, which referred not only to Spain but to the Mediterranean coast in general. It was therefore, in any case, strictly limited. Collaboration with North Africa was essential, especially for Spain, since a great number of Spanish labourers went to Algeria and returned from there every year.

In reply to Professor Cantacuzène, he said that his school thought, in view of the observations made up to the present and which should be continued and extended, that the dog was not perhaps the only, nor even the most important, source of the virus of leishmaniosis.

In reply to Professor Jorge, he said that he was well acquainted with the Portuguese work on the subject, which was of great value. He did not think it necessary to recall at the moment all the contribution made towards the solution of this problem by the different schools — for example, in the first place, by Nicolle at Tunis, and the very important Italian work which had thrown light upon the problem of the epidemiology of kala-azar in Sicily, in Calabria, etc. It would be necessary, of course, to obtain the very valuable collaboration of these authorities.

In reply to Sir George Buchanan, he agreed that the enquiry might be limited to the investigation of the countries bordering on the Mediterranean, provided that the first country to be investigated should be Spain, since it contained important centres of the disease. The Health Committee should therefore take note of his proposal, and he would certainly be most happy to draft a memorandum which would give an estimate of the gravity of the problem.

*The Committee unanimously adopted the following resolution:*

> " The Health Committee, on the proposal of Dr. Pittaluga, decides to entrust him and Dr. Raynaud with the task of making a preliminary study of Mediterranean leishmaniosis. This study, in the course of which the co-operation of all competent authorities may be secured, will be followed by a report to be submitted to the Health Committee at its next session."

**137. Examination of the Report of the Medical Director on the Work accomplished by the Health Organisation since the Third Session of the Committee. (Continuation of the discussion).**

*Epidemiological Intelligence and Public Health Statistics.*

Paragraph 7 of Chapter III of the report of the Medical Director was read (Annex 47).

Sir George BUCHANAN said that, while he realised that most members of the Committee had already formed a judgment on this matter, he would ask leave to submit the following observations.

He had consistently urged, both in the Provisional Health Committee and in the present Health Committee, the need for exercising the greatest care before taking any action which was calculated to give the impression that the Health Organisation undertook the duty of supervising public health administration throughout the world, or that it constituted a sort of "super-public health" or "super-medical" authority. However much the Committee might disclaim this intention, he feared that the proposed series of annual world health reviews would create this impression and lead the Committee in unfruitful directions.

Whatever the future might have in store, he considered that the present was not the time for such an impression to be encouraged. Those who had heard Dr. Cumpston and others last October would realise the reason. The Committee would be far better occupied if it restricted itself to the study of those subjects — themselves sufficiently numerous and important — which admitted of definition and limitation and for which concerted international action promised results of real practical value.

When the Epidemiological Intelligence Service was established by agreement with the Rockefeller Foundation, a catalogue of all the objects which such a service might ultimately carry out was made. At the time, Sir George Buchanan had objected to the insertion in this catalogue of Article (*h*), "a review of the public health of the principal countries of the world with a view to the issue, if circumstances permit, of reports on the subject as a whole", and his assent to the catalogue had only been obtained on the understanding that any action taken under this heading would first receive full and careful consideration by the Health Committee — an understanding emphasised by the English text of the arrangement, which stated that the work undertaken by the service *"may* include" the several subjects noted in the catalogue and not *"will* include", as was incorrectly quoted in the report before the Committee.

It was in his opinion regrettable that, without submitting the question for discussion or direction by the Health Committee, the Secretariat had decided on the issue of an annual volume of progress in public health, had asked the different Government Health Services for the material for such a volume, and had promised expenditure out of the Committee's budget for this purpose. He did not doubt that the President had authorised this action, but he ventured to submit that it had raised a question of principle which the President, in the exercise of his discretion, might advantageously have decided to submit first to his colleagues for opinion.

Even if article (*h*) of the Agreement quoted above were accepted by the Health Committee as a subject which it was desirable for its Epidemiological Intelligence Service at once to pursue, he could not think that the best method of applying this article was to start a series of annual volumes purporting to chronicle progress in public health measures and in the science and art of public preventive medicine throughout the world. The project appeared to him far too ambitious. It would be most difficult to keep a series of this kind, once started, within any reasonable limits. Its obvious deficiencies and inconsistencies at the beginning would lead not to the discontinuance of the series but to ever-increasing demands for information, for the correction of errors or half-truths, for systematic editing by the Secretariat, and for pressure being put on one country after another to add to and magnify its records of "progress".

Sir George Buchanan noted that it was proposed by the Medical Director that the volume should not be edited by the Secretariat but should consist of a series of articles or essays obtained each year from the different Governments of the world, sent to Geneva with the sanction or on the authority of the competent health service of that Government and published as submitted, subject to a prescribed limitation of space. Having had some experience of the preparation of annual reports and surveys, he would point out the enormous difficulty of preparing such a contribution so that it would be of real advantage to public health officers in other countries and would inform the world truly what "progress" the country concerned was making. Inevitably the contributions would be of very unequal value because of the very different conceptions of "progress". They might be easily misleading to those who used the volume for any practical purposes of reference.

He submitted, therefore, that the project should be dropped. If, alternatively, it were not dropped altogether, he thought that the Committee should take the means which were open to it to ascertain the views of the Governments concerned before it went further. He asked that the proposal, after such modifications as the Health Committee might wish to make, be embodied in a memorandum communicated by the Secretariat to the Governments concerned, or that the Committee should submit it to its Advisory Health Council, where the delegates could speak on the matter for their Governments and for the public health departments of their Governments.

When he had received the letter from the President in regard to the proposed periodical general survey he had at once written to the President and to the Medical Director stating his objections to such a scheme. He now, however, found himself confronted with a *fait accompli*, since nearly all the members of the Committee had consented to the production of such a general survey. It was a pity therefore that the attention of the President had not been drawn to the circumstances obtaining when the original agreement had been made. After long discussion the Committee had definitely decided that a list of the subjects which the Epidemiological Intelligence Service might undertake should be made and that before any one of these subjects was selected the Committee should decide upon it. In the report of the Medical Director, there was no reference to the fact that objections had been received.

In regard to the merits of the proposal itself, he thought it was admitted that the year-book should not be edited by the Secretariat, but the volume, in his view, would, in fact, be regarded

as a survey of the public health of the whole world, for which the League would be held responsible.

Further, how would it be possible to record progress in matters of health made by each country, and in what way would the record of that progress differ from the records already published yearly, such as the statistical year-books ? In the thirty pages of information to be furnished by each country, would the adoption of a new law on health be recorded as progress, even though it might be found as a result of practice that the law was ineffective or faulty ? Would administrative decrees be similarly defined or would their results, even if bad, be recorded, and, if so, could these be described as progress ? Would the correspondent chronicle the failures or only the successes of his country ? The scheme seemed to him to lay a very heavy burden on the correspondent.

The PRESIDENT said that Sir George Buchanan's objections fell under two heads: objections to the procedure which had been followed in regard to the question, and objections of principle.

When he had received a letter from the Medical Director asking whether it would be possible to undertake the compilation of the year-book, he had asked the Medical Director to get into touch with every member of the Health Committee. On receipt of their replies, which, with one exception, had been favourable, he had authorised the Medical Director to undertake the preparatory work. There was no question of a *fait accompli*. Nothing was to be decided until the Committee had discussed at its April session the question whether or no the work should be undertaken and the year-book printed.

In regard to the objections of principle raised by Sir George Buchanan, he thought that these could be considered when the question of the publication of the year-book was before the Committee.

Professor Léon BERNARD regretted to be forced to disagree with Sir George Buchanan. Putting aside the question of procedure, which did not concern him, he desired to reply to certain of the objections of principle put forward by his British colleague. Sir George Buchanan had averred that the Health Committee, in publishing this book, would be putting the League into the position of a judge of the health affairs of the different countries and thus, in a certain sense, causing it to assume the position of a super-State. This had been an habitual objection on the part of the opponents of the League, but persons who, like the members of the Committee, were familiar with its work and with its spirit, should not raise criticisms of this kind, which were obviously inexact. How could the League be described as a super-State when it possessed no material force of any kind by which alone it could impose its decision on those of its Members which might not desire to obey it ? The duty of the League in the technical field was to stimulate States to take the measures which it recommended after examination of the problems involved. The League was not a judge, but it set up an example to encourage the nations to improve existing conditions by putting before them what had been achieved by other nations.

Great Britain, at any rate, would have nothing to fear from the publication of such a year-book, since its public health service was probably the best in the world. It was rather his own country — France — which was backward in this respect, and Great Britain would therefore serve as an example. Further, Great Britain always published every year a report of its health conditions which was full, frank and in every way commendable. If every country did the same the improvement in the health conditions of the world would rapidly become much more marked. There were, however, many countries, including his own, which did not publish such reports. Thus, that portion of the year-book dealing with the activities of Great Britain would serve to stimulate his own country and any others to adopt a more progressive policy in health matters.

Recently, he had been asked by the French Academy of Medicine to prepare a report on the various health administrations of the world, but he had replied that it was not possible for him to do so. The year-book of the League, however, would supply this deficiency and by its means those countries which were not fully organised would be stimulated to increased efforts.

The Governments had naturally been consulted and asked to agree to the publication of such a year-book, and those which did not wish to do so would be perfectly free to refuse. As regards Great Britain, there was no need for anxiety, since the health administration of that country printed every year a very full report.

He fully agreed with Sir George Buchanan in thinking that the definition of " progress " was worthy of analysis. In French, progress had two meanings — the first purely literal, referring to the march of events *(marche des choses)*, and the second derived and meaning an advance (amelioration, perfection). If he therefore represented, in the pages which he would prepare on France, that the Ministry of Health had been suppressed, that would indicate progress in the first sense of the word, but not in the second. It was always easy to demonstrate progress in the first sense of the word, but more difficult in the second. An examination, however, of the reports for a series of years would probably enable an observer to gauge with fair accuracy the actual progress in the second sense which had been achieved by any one country. Progress should be understood in its widest sense, and the health administrations of every country should be asked to give the results of all action taken by them whenever possible. He thought that no one could contest the advantage of a publication containing such information. Its greatest use would be to stimulate countries which were behindhand.

Dr. RAJCHMAN, in reply to the objections raised by Sir George Buchanan in regard to procedure, said that he had written to the President, asking whether a letter should be sent to all the members of the Committee and to the health administrations of the various countries in regard to the proposed year-book. The President had replied in the affirmative, and the letter

had been despatched to all the members of the Committee and to the health administrations. An affirmative reply had been received from all the members of the Health Committee except Sir George Buchanan, who had sent various objections, contained in two letters. As a result of these objections the President had placed the question on the agenda of the next session of the Committee — that was to say, the present session. The Committee would now have to decide whether the year-book should be published.

In the meantime, two reports had already been received from Governments (Norway and Sweden). These had been distributed to the members of the Committee, and would be found to be of great value.

In regard to the omission in the Medical Director's report of any reference to the objections made by Sir George Buchanan, Dr. Rajchman was ready to acknowledge that he had been at fault, but he had been under the impression that Sir George Buchanan had distributed his objections to all members of the Committee and not only to the President. Dr. Rajchman desired, however, to point out that he had submitted a proposal which had met with the almost unanimous agreement of the members of the Committee and with the agreement of a very large number of the Governments. In those circumstances it seemed to him that he could not have acted otherwise than he had done.

Sir George Buchanan had expressed the fear that the League might be putting itself in the position of a super-State. On the other hand, he had also pointed out that the Secretariat would not itself edit the year-book. If the Secretariat were not to edit the book, was not that a proof that the League was not putting itself in the position of a super-State ?

The Director of the Health Section had the right to communicate direct with the health administrations, and he had done so. Only two negative replies had been received — from Canada and Australia — and he was himself convinced that when the specimen reports, such as those sent in by Norway and Sweden, had been submitted to those Governments, they would reconsider their decision. Sir George Buchanan maintained that to publish and edit such a year-book would be a very difficult matter. That was obviously true, but it was equally true of any new departure in any international field. The same objection had been raised, for instance, to the preparation of the yearly manual of statistics, which had proved to be the greatest success. All that the Secretariat would do in this matter would be to put in one volume the health reports made by the health administrations. These reports he thought would be of great value.

Sir George BUCHANAN said that he would not discuss the merits of the question further. Despite the arguments of Professor Léon Bernard, he still maintained his point of view.

In regard to procedure, he ventured to hope that no member of the Committee would at any future time be placed in so difficult a position. He was compelled regretfully to vote against the proposal.

The PRESIDENT hoped that all misunderstanding concerning questions of procedure had been cleared up. He submitted paragraph 7 of the Medical Director's report to the vote.

The result of the vote was as follows: In favour, 11; against 1; abstention 1.

*Paragraph 7 was accordingly adopted.*

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## FIFTH MEETING

*Held at Geneva on Thursday, April 23rd, 1925, at 10 a.m.*

Present: All the members of the Committee, with the exception of Dr. Chagas, Surgeon-General Cumming, Dr. Alice Hamilton, Dr. Granville and Dr. Mimbela.

138. **Examination of the Report of the Medical Director on the Work accomplished by the Health Organisation since the Third Session of the Committee.** *(Continuation of the discussion.)*

*Epidemiological Intelligence and Public Health Statistics.* (Continuation of the discussion.)

Paragraph 8 of Chapter III of the report of the Medical Director was read (Annex 47).

Sir George BUCHANAN thought that it would be of great use if means were found to obtain certain epidemiological information by wireless telegraphy. Nevertheless, this part of the Medical Director's report called for some consideration.

The object of the proposed measures was immediately to organise an intelligence service for the distribution of information between the Secretariat at Geneva and the health authorities of ports in the Mediterranean and Black Sea in regard to plague and cholera. The steps contemplated, however, differed greatly from what had hitherto been the general practice at Geneva and from what was about to be put into practice at Singapore.

Geneva received information in regard to infectious diseases covering all countries and all districts but containing no special data concerning ports. The information received was published and distributed, but it did not profess to provide a special means for enabling the sanitary authorities of ports to decide upon the action they should take in regard to shipping.

In Singapore endeavours were being made to associate the port authorities in the work. But in this case, where there was an intelligence service specially related to the condition of ports, and which would be used in dealing with ships, nothing was done until a conference representing the Governments concerned had met, at which the representatives of those countries had been able to give their views in regard to the working of the intelligence service.

It was proposed to follow a third principle in regard to the Mediterranean and Black Sea ports. Information concerning these ports would be collected by means of a system of correspondence organised without recourse to a previous conference or without securing any previous mutual understanding between the countries concerned. The explanations contained in the report appeared to show that this system would be extremely convenient and harmless. In reality, however, this seemed to him open to question, since the time was about to arrive when the matter would be dealt with by the International Sanitary Conference. For example, in what light should the authorities who received information from the Secretariat consider that information ? What use would their port sanitary authorities make of it ? Would the information be private and confidential or would it be given to the public ?

Further, he desired to know what procedure had been followed by the Secretariat in entering into communication with the health services. If, for instance, the case of the Turkish Black Sea ports were taken, was the responsible authority for the communication of the information the Ministry at Angora or the health administration at Trebizond ? Would correspondents furnishing information be paid ? Further, the value of the information to be received appeared open to doubt, and it was equally doubtful whether the League of Nations, merely upon the receipt of an unofficial telegram, had the right to announce that cases of plague had or had not occurred in Trebizond. Great prudence must be shown before making the League responsible for publishing such information until there had been international agreement or at least local agreement between the Governments concerned, in regard to the use of this special information for port sanitary purposes.

The draft health convention of the Office international d'Hygiène publique contained a special section on this question. When that section was discussed the question could be examined more thoroughly.

The report of the Medical Director stated that certain countries had already informed the Secretariat of their adherence to the scheme, more particularly Palestine and Syria. Sir George Buchanan was not qualified to speak for Syria, but in regard to Palestine he wondered whether the Director of the Health Service in this mandated territory had sent his adherence on his own responsibility without referring the matter to the High Commissioner. In any case, Sir George Buchanan was unaware that any such authorisation had been granted by the health administration of the mother-country.

The foregoing observations were not the result of premature uneasiness. Sir George Buchanan had demanded explanations because the Press, through certain journalists who were under the impression that they were well informed, had already announced that the system of communications with the Mediterranean and the Black Sea ports had been definitely established.

To sum up, he thought that the Secretariat should prepare a memorandum on the preliminary enquiries to be carried out, on the measures taken by the Mediterranean and Black Sea health authorities concerned and on the method of distributing such information. Nothing more should be done for the moment. In the meantime, between the two sessions of the Committee, the Medical Director could keep the members of the Committee informed of the negotiations which he was authorised to undertake with the various health authorities.

Dr. RAJCHMAN, in reply to Sir George Buchanan, desired to give certain explanations on the question.

It was true that the Epidemiological Intelligence Service had only just discovered the importance, in the question under discussion, of the Mediterranean and Black Sea ports. It should be remembered, however, that only two years had elapsed since the importance of Singapore in this respect had been discovered. It was a fact worthy to be remembered that for the first time in the history of preventive medicine cases of plague in the Far East had been, three weeks previously, publicly reported by telegram, thanks to the Singapore office.

Sir George Buchanan had asked what use would be made of the information coming from the Mediterranean and Black Sea ports. This question had been examined when the weekly bulletins to be forwarded by the Singapore office, which was one of its principal duties, had been discussed. Information contained in this bulletin came from official sources. Official information services had already been set up by certain of the great Powers. The United States possessed one, the British Health Minister published weekly a very interesting bulletin based on consular reports, but this bulletin was confidential. It was necessary for the League of Nations to issue a public bulletin based on information coming from public health administrations. In regard to the intrinsic value of the information forwarded, it was unavoidable that information coming from different sources should not possess the same val ue.

In regard to the use of this information, there could be no question. It was quite true that the Singapore office despatched valuable information, but the danger of plague for Europe did not stop in the Far East. There were, nearer Europe, Mediterranean and Black Sea ports. From the very first the Committee had expressed the opinion that the Epidemiological Intelligence Service, if it were to be of value, must organise a system for the rapid collection and despatch of certain epidemiological information. Four years, however, had elapsed before the first step had been taken in this direction as far as Europe was concerned.

Sir George Buchanan seemed to have certain doubts as to the procedure followed by the Secretariat, The Medical Director reminded the Committee that, before sending the first letter of enquiry, he had, on January 17th, 1925, written to Sir George Buchanan in order to give him a detailed description of the steps which it was proposed to take. He read the letter, together with the reply of Sir George Buchanan. On receiving this reply he had written to all the health administrations mentioned in his letter to Sir George Buchanan. He had in no way proposed immediately to establish the system. The report explained the exact position of matters at present.

In regard to the adhesion of Palestine, to which reference was made in the report, the Medical Director read the letter which he had received from the Director of Public Health in Palestine. This letter contained a formal and explicit adherence, but did not state whether the official in question had been authorised or not by his Government to give such an adherence.

The correspondence exchanged with the health services of Syria was of the same nature.

M. Velghe was doubtful whether the discussion on the question, which had been fully examined, should be prolonged.

Sir George Buchanan said that he had merely mentioned Palestine in order to inform the Committee that, in his opinion, the phrase in the report appeared to be somewhat excessive. He did not, however, desire to discuss the procedure adopted by the mandatory Powers in regard to mandated territories.

Dr. Rajchman wished to give certain further explanations. He thought that the Committee had the fundamental right to communicate direct with all the public health administrations. Similar direct communication had been provided for by the Rome Congress in 1907 when it decided to establish in Paris the Office international d'Hygiène publique. Further, when the Assembly of the League had discussed the Health Organisation for the first time it had been decided, as a result of a scheme drawn up by Sir George Buchanan, that the Technical Secretary of the provisional organisation, who had later become the Medical Director, should have the power to communicate direct with the health administrations of all Governments. The Medical Director had therefore merely carried out the intentions of the Health Committee.

Dr. Raynaud laid emphasis on the necessity for obtaining as rapid information as possible concerning Eastern and Far Eastern ports. The position which he had occupied for twenty-five years enabled him to realise the great inconvenience of not receiving immediate information in regard to the general health situation. Information on this subject was only obtained by telegrams from the various Ministries of Health transmitted by countries to the Ministry for Foreign Affairs. The Ministry for Foreign Affairs, however, only distributed a very small amount of such information. Further, the *Bulletin* of the Office international only appeared monthly and thus only gave cases which had occurred too long ago.

The British Consul at Algiers had been good enough to communicate the weekly bulletin to him, but this document was confidential and was composed of information furnished by the consuls which did not always come from official sources. The situation would be still more complicated when the patent expired. On the other hand, the moment that information coming from the heads of health services was communicated by wireless, the port authorities would know what action to take in regard to a ship coming from a district where cases of plague or cholera had been notified.

Dr. Lutrario wished to present certain personal observations, since his Government had not yet taken a decision on this question. He thought that the system of distributing information by telegram was extremely useful and he had said so in a letter to the Medical Director. The question arose, nevertheless, as to the legal value to be given to such data. Did it consist of a definite notification or of mere information ? It was obvious that such data could not be considered as an official notification. The International Convention of 1912 laid down strictly the procedure to be followed in regard to official notification which had to be sent through diplomatic channels. The communications in question, therefore, could only be considered as mere information, as guiding lines for the health administrations. He knew that the Medical Director held the same view.

M. Velghe pointed out that such information would serve as a kind of warning.

Professor Cantacuzène thought that he could undertake that Roumania would follow the example of Bulgaria. The moment he returned to Bucharest he would take the necessary steps to ensure that the authorities of the Black Sea ports transmitted the information direct.

Sir George Buchanan hoped that all possible ambiguity would be removed. It was essential to have immediate and speedy information in regard to these diseases, and he had always urged this in the past. He felt compelled, however, to point out that to establish a system whereby information was despatched by a special service, while at the same time ordinary diplomatic channels were also to be used, seemed to him to hinder, if not to destroy, the aim of the Committee.

He had understood that the Committee proposed to substitute for the usual diplomatic channels, which was the most uncertain and slow source of information, the recognition in the international convention of a special system of intelligence. It was impossible for this system to be an unofficial one. He had always been strongly in favour of inserting in an international convention a definite article making provision for the despatch of this information. The more reliance that was placed upon diplomatic procedure the more difficult it was to set up a satisfactory system for dealing with the question of health in ports. The Committee should not put itself in a false position by endeavouring to combine two procedures.

Professor PITTALUGA asked the Medical Director whether any adhesions in addition to those mentioned in his report had been received.

Dr. RAJCHMAN replied in the negative. The Committee would note, however, the statement made by Professor Cantacuzène.

Professor PITTALUGA said that he expected to be able to obtain the adherence of the Spanish health service.

Sir George BUCHANAN asked precisely what the adoption of paragraph 8 of the Medical Director's report entailed. Did it mean that at any time after an arrangement had been reached, a code, together with instructions as to how to use it, the date of circulation of information, etc., would be sent to all adhering States, or would the whole scheme be laid before every State beforehand ? In what way exactly would the Epidemiological Intelligence Service perform its duties ?

Would the Committee be authorising the bureau to send out information in regard to notifications received by wireless from those countries which complied with their request ? Would all countries know precisely the ports to which the new system applied ? It was just as important for negative information to be obtained as positive.

The PRESIDENT explained that the bureau would not circulate this information.

Dr. RAJCHMAN explained that, in the event of the Committee adopting this passage of the report, the procedure would be as follows:

The Epidemiological Intelligence Service would carry on and complete these enquiries, and prepare the memorandum, based on the replies received and containing definite proposals in regard to the working of the system. Nevertheless, before putting it into practice the plan would be submitted to the Bureau for approval.

Sir George BUCHANAN said that in those circumstances he agreed to the proposal.

*Paragraph 8 of Chapter III of the report of the Medical Director was adopted.*

*International Investigation into the Question of Disinfection.*

The relevant passage of the Medical Director's report was read (Annex 47, Chapter II, Section III).

Sir George BUCHANAN said that the United Kingdom was not to be found in the list of countries the central administrations of which had entrusted experts with the preparation of reports on this matter for the Health Committee because it had not yet replied. A question had arisen in connection with a proposal before the Ministry of Health for a detailed investigation into this matter. As such an investigation would be long and difficult, but would be very carefully carried out, the British Ministry of Health did not propose to reply until it had the results of that investigation before it. The moment the enquiry had been concluded he would be glad to communicate the results of it to the Committee.

The PRESIDENT thought that this report would be a very interesting one.

Dr. LUTRARIO explained that the enquiry was being carried out in Italy. Much information had already been collected and it would shortly be possible to report on the whole matter.

In reply to a question from M. Velghe, Dr. Lutrario explained that there were no general regulations in Italy on the question, but there were various documents which it would be necessary to collect for the purpose of the report.

Professor PITTALUGA asked the Medical Director whether it would be possible to ask Dr. Victor Cortezo, head of the State Disinfection Service of Madrid, to draw up the report for Spain.

Dr. RAJCHMAN replied in the affirmative.

*Chapter II, Section III of the report of the Medical Director was adopted.*

139. **Question of the Working of the Epidemiological Intelligence Bureau at Singapore: Examination of the First Report on the Far-East Commission.**

The PRESIDENT asked Dr. de Vogel to come to the table of the Committee.

The report of Dr. Jitta was read (Annex 53).

Dr. JITTA said he desired to thank Dr. Norman White for the excellent work which he had done during his tour.

Sir George BUCHANAN noted that it was proposed in the report to add to the Advisory Council one or more members of the Health Committee. He proposed to amend the text by inserting the words " one or more representatives of the Health Committee ", so that, if necessary, an official of the Secretariat, such as Dr. Norman White, could represent the Committee on occasion.

*This amendment was adopted.*

Dr. TSURUMI congratulated Dr. Jitta on his report and associated himself with the thanks expressed to Dr. Norman White.

*The report was unanimously adopted.*

The PRESIDENT, on behalf of the Committee, congratulated Dr. Norman White on the success of his mission during the Singapore Conference.

## 140. Examination of the Report of the Opium Commission.

Dr. CARRIÈRE, Chairman of the Opium Commission, presented a report (Annex 54) concerning certain provisions of the new International Opium Convention adopted at Geneva on February 19th, 1925. The application of these provisions, which were contained in Articles 8 and 10 of the Convention, would necessitate the co-operation of the Health Committee and of the Permanent Committee of the Office international d'hygiène publique.

Article 10 dealt with narcotics which later would be recognised as giving rise to toxicomania and which were analogous with those already known in this connection; these should, therefore, come within the scope of the Convention.

The object of Article 8, on the other hand, was to exempt from the provisions of the Convention certain medicines containing a narcotic drug, in addition to other substances and of such a composition as to make it impossible for the narcotic to be extracted and consumed separately.

In both cases, in order to prevent any exaggerated or arbitrary application of the Convention, provision had been made to obtain a considered opinion from the Permanent Committee of the Office international d'hygiène publique at Paris before any final decision was taken.

As the Convention would doubtless begin to come into operation fairly soon, it was necessary to take the proper steps immediately to put into practice the procedure outlined in Articles 8 and 10. The Opium Commission, after having taken note of two memoranda of Professor Knaffl-Lenz, proposed:

(1) As far as Article 10 of the Convention was concerned, to draw the immediate attention of the Permanent Committee of the Office international d'hygiène publique to two products, eukodal and dicodide — both derivatives of morphine and of codeine — and to ask it whether it thought that the harmful properties of these two products were such as to necessitate their inclusion within the scope of the Convention;

(2) As far as Article 8 was concerned, to ask the Governments to send to the Committee a list of products, containing narcotics, which in their opinion ought to be exempted from the Convention; once in possession of this information, the Health Committee would communicate it to the Permanent Committee of the Office international d'hygiène publique with a view to receiving an opinion and a report on them.

It was obvious that, in notifying the Office international, the Health Committee could make any observations and suggestions which it might think necessary and that it was at liberty to reserve the right to examine and discuss the opinions and reports of the Permanent Committee of the Office. On the other hand, it was obvious that the Permanent Committee of the Office would be free to extend its investigations to products other than those brought to its notice by the Health Committee and to inform the Health Committee of its suggestions in regard to them.

Dr. Carrière desired also to draw the attention of the Committee to a point which was not dealt with in his report. The Hague Convention contained a provision which exempted from its scope products which did not contain more than 0.2 per cent of morphia or 0.1 per cent of cocaine or heroin. In regard to heroin, the members of the Committee would doubtless remember that they had been called upon to give an opinion in regard to its complete prohibition and that they had considered that this prohibition could not come into force until a serious medical enquiry had been undertaken in order to obtain exact information as to the real use of this substance. The question of heroin had been raised in the International Opium Conference, where the delegates of the United States had once more demanded its absolute prohibition. Like the Health Committee, the Conference had not been ready to agree to this, but it had decided, in order to show that it considered heroin to be a particularly dangerous drug, to extend to it no special measure of exemption, so that in future all preparations containing heroin would fall, whatever the proportions of the drug in them, within the scope of the Convention.

Dr. Carrière concluded by asking the Committee to accept the report of the Opium Commission, and the proposals embodied therein.

Professor Léon BERNARD drew the attention of Dr. Carrière to the fact that, though the report mentioned the letter which the Health Section would be required to send to States asking

for a list of substances which they desired to be covered by Article 8 of the Convention, no mention had been made of the letter which the Opium Commission had decided should be sent to the Office international to ask it officially to take all necessary measures in order to ensure the proper working of Article 8. The Office international, or at any rate the French administration, wished the Health Committee to make an official communication to it on this question.

Dr. CARRIÈRE thanked Professor Léon Bernard for having pointed out this involuntary omission in the report, which would be rectified.

Since he was speaking again, he wished to add that the members of the Health Committee would no doubt gladly welcome, thanks to the new International Opium Convention, the inauguration of that practical collaboration with the Office international d'hygiène publique which it was the desire of everyone to see steadily developing.

Sir George BUCHANAN said that the meaning of the phrase in the third paragraph of the report of the Opium Commission — "To inform the Committee whether it thought that eukodal and dicodide were subject to the terms of the Convention" — appeared to be ambiguous. What the Office international d'hygiène publique would be asked to consider was not whether those substances were subject to the terms of the Convention but whether they ought to be.

Dr. CARRIÈRE explained that the opinion asked of the Office international was a purely technical and not a legal one.

*The report was unanimously adopted.*

### 141. Examination of the Report of the Commission on Instruction in Public Health.

Professor Léon BERNARD read the report of the Commission (Annex 55).

The Commission in question had not been able to reach final conclusions, not only because it had only just begun its work but because the nature of that work compelled it to pursue investigations on the spot, which would take a considerable time. Further, at each new step new difficulties arose. He was regretfully compelled to note that the Commission had not been able to obtain the co-operation of Sir George Newman, which was necessary if its work were to be complete. The explanations given by Sir George Buchanan had shown why Sir George Newman, who had not been sufficiently informed of the views and methods of the Committee, had abstained from taking part in its work. It might perhaps be useful to dissipate entirely the misunderstanding which had already been cleared up in the previous October. The investigations undertaken by the Committee in no way implied any outside control and could not therefore offend the susceptibilities of anybody. He hoped that Sir George Buchanan would succeed in inducing Sir George Newman to reconsider his decision, for his collaboration was much desired by the Commission and its Chairman as well as by the Health Committee itself.

Dr. NOCHT wished to fulfil a promise which he had made to several of his colleagues. He also had noted that investigations carried out on the spot had encountered opposition on the part of certain of his colleagues who appeared to think that such an enquiry involved a certain amount of outside control. Above all, that feeling was due to the fact that German science and scientists were still excluded from several international congresses. He had undertaken to acquaint the Health Committee with this fact.

Professor Léon BERNARD desired to reply to Professor Nocht. After such a catastrophe as the late war, it had been difficult to resume normal relations between peoples. The best proof that these difficulties were getting less as time passed was to be seen in the relations which existed between Dr. Nocht and the members of the Committee, including himself. Account should be taken of the fact that the world had to pass through a period of transition of some complexity. The present question would not have arisen if in all international congresses or associations the same statutes had been adopted as those adopted, for example, by the International Union against Tuberculosis, which had been established on the principle of the League of Nations. The moment Germany entered the League, it would, at the same time, enter all these congresses or associations. Unfortunately, certain international associations and certain scientific congresses had not always been inspired by this spirit. As a result, differences of treatment existed. Undoubtedly, the question should not arise in connection with the work of the technical organisations of the League, which was largely open to German co-operation. The presence of Dr. Nocht in the Committee, as well as the participation of German scientists in the enquiries undertaken by the Committee, were the best witnesses.

In regard to the special question of instruction in public health, the investigations into this field would be incomplete if no account were taken of the German universities, just as any serological work would be incomplete if no account were taken of German scientists and German laboratories.

It was all a question of degree while waiting for the existing state of affairs gradually to improve. It was to be assumed that any member of the Committee who went to Germany would undoubtedly submit the question in such a way as to assure the desired welcome.

Further, similar opposition to that shown in German universities had arisen in the universities of other countries. Misunderstandings, however, had been cleared up whenever the Rapporteur had acted in the same spirit as if he were going to the country in order to pay a visit to a colleague.

He would be glad if Dr. Nocht would act as intermediary between the German universities and the Committee, and make his colleagues understand that the study being undertaken would serve as a useful opportunity for re-establishing that universal scientific co-operation which was desired.

The PRESIDENT hoped that the explanations of Professor Léon Bernard had given satisfaction to Dr. Nocht. As Professor Léon Bernard had reminded him, the Committee had, very shortly after its formation, invited German scientists to take part in the First Conference on the Standardisation of Sera, which was held at London in 1921.

Sir George BUCHANAN undertook to inform Sir George Newman of the high appreciation which the Committee felt for his work on public health, and he would be happy to convey to him the result of the discussion. He was quite certain that Sir George Newman had no desire to be thought unsympathetic towards the proposals. The only doubt which had arisen was on the method of procedure. The British view, if he might so term it, was that individual arrangements should be made as far as possible and the fullest facilities accorded to individual professors and experts to investigate the public health systems of foreign countries. On the other hand, it had seemed somewhat doubtful whether it was quite sound policy for an expert to be sent to Germany as if he were directed to go on behalf of the League to report on education in that country. He had no authority for the suggestion, but perhaps Sir George Newman could be of the greatest use to the Committee at a later stage, if he were asked to give his impressions and to compare the systems of the various countries.

The PRESIDENT considered that the proposal of Sir George Buchanan was a most satisfactory solution of the question.

Dr. CARRIÈRE said that he had had the great pleasure of welcoming Professor Ottolenghi when he had visited Berne while collecting information on Switzerland. Unfortunately, the reports which he had asked the professors of public health in Switzerland to supply had not arrived in time to enable him to draw up the memorandum which he had promised Professor Ottolenghi. He thought, therefore, that the latter's visit to Switzerland should merely be regarded as an initial visit and that he would carry out a final one, during which Dr. Carrière would be happy to give him all the information necessary for the accomplishment of his mission.

Dr. Carrière added that the steps which he had taken had in no way aroused any feeling of distrust or hostility among the professors of public health in Switzerland. On the contrary, they had all shown the greatest good-will and desire to furnish him with the information he had required.

Professor OTTOLENGHI thanked Dr. Carrière for the welcome which he had received at Berne. The information promised him would be of very great utility. He stated that all the Swiss university professors whom he had visited had given him the warmest welcome.

*The report of Professor Léon Bernard was unanimously adopted.*

### 142. **Budget of the Health Organisation for the Year 1926.**

M. VELGHE, Chairman of the Budget Commission, said that the Commission had approved in their entirety the proposals of the Medical Director, which could be submitted with confidence to the Assembly.

The increase in the budget for this year was quite natural and moderate. The increase in the salaries of the staff was due partly to the annual statutory increments and partly to the fact that the staff had been increased by three officials. The increase in the travelling and subsistence allowances resulted from the experience of last year, when it had been found that the sum of 40,000 francs had not been sufficient; the increase of 15,000 francs for the item " Publications " was justified by the high cost of publishing and of the importance of the publications in question. The sum required to cover the enquiries and the sessions of the Committee was approximately the same as the sum expended in 1924. It might be of interest to the Committee to give details in regard to the credit of 350,000 francs asked for the technical commissions.

*Cancer Commission:* 30,000 francs (same as 1925).

In regard to the cost of printing, the Medical Director was ready to discuss the matter with Sir George Buchanan.

*Tuberculosis Commission:* 30,000 francs (same as 1925).

*Commission on the Standardisation of Sera and Biological Products:* 90,000 francs.

In reply to a question of Sir George Buchanan, Dr. RAJCHMAN explained that there was not really any increase under this last heading, and that a reduction had even been effected in regard to serological research work properly so called. Nevertheless, the President hoped that it would be possible for him to convene next year two international conferences with a view to a general acceptance of the results obtained. The sum of 50,000 francs had been set aside for these two conferences.

Sir George BUCHANAN asked whether the budget included provision for the investigation of pharmacological standardisation.

The PRESIDENT replied in the negative,

M. VELGHE continued his explanations.

*The Commission on Instruction in Public Health:* 23,000 francs, as against 20,000 francs in 1925.

*Malaria Commission:* 125,000 francs — an increase of 65,000 francs.

*The Commission on Sleeping-Sickness:* 50,000 francs.

M. Velghe thought that this last sum was very small and that it would be difficult not to exceed it.

He asked the Committee to approve unanimously the proposals of the Budget Commission.

Sir George BUCHANAN asked for figures for 1925 in respect of the salaries paid to temporary staff.

Dr. RAJCHMAN explained that these salaries were not charged to the budget of the League but were paid from the credits granted by the Rockefeller Foundation. A reduction had been effected. The figure for the previous year had been 169,361 francs. This year it was 161,333 francs.

*The budget was unanimously adopted.*

143. **Examination of the Report of the Medical Director on the Work accomplished by the Health Organisation since the Third Session of the Committee.** (Continuation of the discussion.)

*Participation and Representation of the Health Organisation in the Work of Congresses and Conferences.*

Chapter V of the report of the Medical Director was read (Annex 47).

In regard to paragraph 5 (International Congress of Malaria), Dr. LUTRARIO proposed to add at the end of the first paragraph the words "as well as with members resident in a country". This would cover the case of Professor Ottolenghi.

Dr. RAJCHMAN said that it was obvious that Professor Ottolenghi would attend the Conference.

*This chapter of the report of the Medical Director was adopted.*

*Chapter VII: Miscellaneous.*

Sir George BUCHANAN proposed, with regard to the last paragraph of the report, that a classified list of publications should be included in the report showing what documents of the Committee were available for the general public and for doctors and what were reserved for the use of Commissions.

Dr. RAJCHMAN said that the necessary action would be taken.

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## SIXTH MEETING

*Held at Geneva on Friday, April 24th, 1925, at 10 a.m.*

Present: All the members of the Committee, with the exception of Dr. Chagas, Surgeon-General Cumming, Dr. Alice Hamilton, Dr. Granville and Dr. Mimbela.

144. **Examination of the Report of the Medical Director on the Work accomplished by the Health Organisation since the Third Session of the Committee.** (Continuation of the discussion.)

*Standardisation of Sera and Biological Products.*

Chapter IV, Section I of the report of the Medical Director was read (Annex 47).

The PRESIDENT explained that the Copenhagen Institute had received samples of anti-diphtheritic serum from various national institutes and that it had compared these samples with the standard serum. There was a perfect correspondence between them.

The researches into the anti-tetanic serum had been continued with satisfactory results. It would be remembered that the object was to establish a standard which should be equal to one-half of the American unit and about one-hundredth part of the German unit. Numerous comparative titrations had been made by the Institutes of Frankfort, Washington and Copenhagen. The Danish Sero-therapeutic Institute had prepared a certain quantity of a dry anti-tetanic serum which was intended for the establishment of the new standard unit.

As regards dysentery, the conclusions adopted by the Dysentery Conference which had met at Geneva last September had had to be somewhat revised, and the new draft which had been proposed had been adopted by those who attended the Conference.

In view of the fact that agreement had been realised at Geneva as to the technical process to be followed in titration, the Danish Sero-therapeutic Institute was preparing a certain quantity of dry anti-dysenteric serum which would serve for the establishment of the new standard anti-toxin. There was not, however, at Copenhagen an apparatus in which it was possible to dry a large quantity of serum, and it had therefore been necessary to have recourse for this work to an establishment at Munich.

The new standard serum did not include any antiseptic substance. The researches into titration *in vitro* were being continued in Paris and in England. Messrs. Dopter, Dumas and Ramon were endeavouring to systematise a process of titration based on the principle of floculation.

The anti-pneumococcal serum, which was little used in Europe, was at present the subject of new clinical investigations in the United States. It would be well to await the end of these investigations before attempting to arrive at any decision regarding the therapeutic value of this serum.

The question of the various types of pneumococci had been studied by several investigators. It appeared from these investigations that the various types seemed to be fairly stable and fairly similar in all countries.

As regards types of meningococci, the question was more complex, and it was difficult to obtain a sure basis for determining the various types in the different countries. No further progress had been made in the titration of the anti-meningococcal serum. It was at present impossible to reach agreement concerning the basis of this titration.

The impossibility of obtaining an international standardisation of anti-streptococcal serum had been emphasised in a memorandum by Professor Morgenroth.

As regards the investigations at present being made in America into scarlatina and into the use of the anti-scarlatina serum, it would be premature to take any decision.

The question of the anti-melitococcal serum must also be reserved.

On the other hand, the anti-anthrax serum seemed to have a real therapeutic value, and he asked Professor Ottolenghi to undertake a preliminary study of this question, getting into touch with Professor Sclavo, who was an expert on the matter.

Professor CANTACUZÈNE, Professor PITTALUGA and Sir George BUCHANAN said that the anti-anthrax serum had given excellent therapeutic results in their respective countries.

The PRESIDENT referred to the work recently undertaken in the United States and in Europe in regard to diphtheria and scarlatina which had led to the use on a large scale of the Schick and Dick tests. The question of an international titration of the substances used for these reactions might one day be made the subject of an enquiry, but it was still premature.

In regard to the sero-diagnosis of syphilis, new laboratory researches had shown the reasons for the divergences noted during the technical meeting at Copenhagen between the Bordet-Wassermann and Sigma tests. At Copenhagen, experiments based on 2,000 cases had shown the value of employing two combined methods: in this case, the Sigma and Bordet-Wassermann tests, which made a reciprocal control possible.

The President announced his intention of convening, perhaps next year, a further laboratory Conference to deal with the serological tests for syphilis.

The previous Conference had been composed of specialists, but without regard to countries. It would perhaps be more in the spirit of the Health Committee if, in future, steps were taken to ensure the presence of representatives of a larger number of countries.

Professor CANTACUZÈNE said he wished to present certain observations on facts which had been noted in Roumania. Hitherto in Roumania only the A B and C strains of the meningococcus had been encountered. Last year, suddenly, the serum had ceased to yield results, and the appearance of the strain D had been observed. The reasons for this phenomenon were still unknown.

As regards anti-streptococcal serum, it appeared that streptococcus in cultures quickly lost its efficacy as an antigen, and it was only possible to obtain a really active serum when the stocks were systematically renewed almost every week by means of fresh strains. In these circumstances it appeared difficult to arrive at a method of titration.

The results obtained by the administration of anti-anthrax serum were so conclusive that the time seemed to have come to undertake investigation for its titration.

Professor OTTOLENGHI agreed with Professor Cantacuzène concerning anti-anthrax serum which was effective even during the last stages of the disease. He would willingly try, in collaboration with Dr. Sclavo, to prepare a standard serum.

Sir George BUCHANAN said that the information given by the President testified to the utility and steady progress of this important branch of the work of the Health Committee. So far as the British workers were concerned, the results had been found to be very valuable, and they were glad to give their fullest collaboration. The position in regard to the Shick and Dick anti-toxins deserved consideration. Two or three different lines of enquiry were being pursued in England in regard to the Dick reaction. Intensive experiments were being carried on in one or two cities at hospitals where the reaction could be studied and the streptococci identified, the Dick test not being applicable to animals.

He did not consider that the time had yet come to take up internationally the question of scarlatina tests and the bacteriology of scarlet fever. The results were not yet sufficiently clear and established. At any rate, before taking up the question, there should be an opportunity of discussing it further in the Committee. He would also like to have a more precise idea of the suggestions which had been made for the new conference. Would it be invited to take up questions which had already been dealt with by the Permanent Standards Committee with a view to ascertaining whether, by means of international agreements, better effect could be given to the proposals already made by this Committee, or was it proposed that the conference should deal with other subjects ?

Professor CANTACUZÈNE entirely agreed with Sir George Buchanan. The question of the serological reactions of scarlatina was little known; it was connected with a problem which was little elucidated and it would be premature to include it among the items for an international enquiry.

The PRESIDENT agreed with this point of view. There was no question of embarking upon such studies immediately. The work in question, which had been undertaken in the United States, had only been begun last year.

He explained that the decision to be taken concerning the technical laboratory conference would greatly depend on the progress made during the year. It was advisable to wait for the results of the work of the large laboratories dealing with the serology of syphilis.

He pointed out that certain laboratories had suggested that an international study of the antigens sh u d undertaken.

Professor Léon BERNARD supported the views expressed regarding the Dick test. Researches made in his laboratory had made it possible to realise that the question was still in the experimental stage.

Sir George BUCHANAN said he had been greatly struck by the way in which the Standards Committee itself had done its work. He wondered whether it would greatly assist this work to convene at this stage in addition a conference of Government representatives. Had the time yet arrived when the results achieved were sufficiently final to make it worth while to call together such a conference ? There seemed to be no real necessity for a conference except with a view to embodying these results in international agreements.

The PRESIDENT explained that Sir George Buchanan was under a misapprehension, and that it was not proposed to convene a conference of representatives of Governments, but to associate with the work of the Committee scientists from certain countries which had not yet participated in the enquiries undertaken by the Committee in this connection and whose collaboration would be useful.

Referring to paragraph (*e*) of this section of the Medical Director's Report, he would draw attention to the report of Professor Dale (see Appendix 6 to Annex 47), concerning digitalis, insulin, pituitary extract, thyroid substances, salvarsan, etc. It appeared from this report that it would be possible to convene a conference towards September 1st, consisting of almost the same members as those who took part in the Conference at Edinburgh, which would make it possible to come to some conclusion in regard to several of these products.

Dr. RAJCHMAN, in reply to a question from Sir George Buchanan, explained that the conference might meet at Geneva. The Bureau of the Committee was in correspondence with Professor Dale on this subject.

*Chapter IV, Section 1, of the report of the Medical Director was approved.*

*Investigation of the Existing Regulations for the State Control of Biological Products and in particular of Insulin.*

Chapter II, Section II of the report of the Medical Director was read (Annex 47).

Dr. RAJCHMAN, referring to the first paragraph of this section, thought it would be preferable not to insert among the annexes to the Minutes of the present session the small preliminary report which he had prepared. The report would be presented at the October session.

Sir George BUCHANAN said he agreed with the suggestion made by Dr. Rajchman. He handed in a statement concerning the position in Great Britain in regard to insulin which would h lp to complete the memorandum.

Dr. LUTRARIO observed that the control of pharmaceutical products was carefully regulated in Italy.

*The first paragraph of the section under discussion was approved.*

The PRESIDENT, referring to the second paragraph, read a note by Professor Poulsson (Annex 56) on the necessity for the international regulation of the sale of patent medicines.

Professor KNAFFL-LENZ read the following statement:

In addition to the statement of Professor Poulsson, may I be allowed to give the following information as to how matters stand at present.

During the third session of the General Assembly of the Central Committee of the International Pharmaceutical Federation which was held in Brussels on April 29th, 1922, M. R. Pattou, of Belgium, submitted the following proposal:

> "The Central Committee of the International Pharmaceutical Federation invites the Bureau to examine what international action can be taken in order to regulate the sale of patent medicines *(spécialités pharmaceutiques)*, both from the scientific point of view and from the point of view of professional interests."

This proposal was adopted and a special Committee was appointed to investigate the regulation of the sale of patent medicines. The report of this Committee, which bore the signatures of M. van Itallie and M. Hoffmann (Netherlands), contained the conclusion that patent medicines are to be considered as products composed of one or more chemical substances or drugs placed on sale under a special trade-mark or wrapping without regard to the question whether the therapeutic value of the product had been scientifically recognised or not. An international pharmacological secretariat would be entrusted with the duty of investigating the regulation of the sale of patent medicines. Further, it had been thought necessary that competent authorities in all States should carry out a strict control over all patent medicines and that these authorities should have the right to authorise or to prohibit their sale with a view to protecting the public against purchasing products of no value or at a price greatly in excess of their real value.

The Committee had expressed the opinion that the regulations in force in Austria could serve as a basis for an international regulation. The main provisions of the Austrian law are as follows:

By "patent medicines" is understood medicines prepared by chemical or mechanical processes destined for direct sale to the consumer in chemists' shops in a special form, wrapping or dose. The sale of these preparations is governed by special regulations. Sero-therapeutic and organo-therapeutic preparations are not governed by these regulations, nor are vaccines, cultures or bacteria and such dietetic and cosmetic preparations as possess no curative properties.

Requests for authority to place on sale patent medicines, both national and foreign, have to be sent into the Ministry for Social Insurance either by an Austrian chemist or manufacturer or an Austrian laboratory offering adequate guarantees as regards the preparation of the product.

Requests for authorisation must be accompanied by two samples; the composition of the medicine, together with the quantity of each substance used, must be shown, and all labels and trade descriptions of the preparations have to be sent in, together with the name of the product, the method of use and its price. Samples of non-officinal products must also be submitted. All requests for authorisation for sale are taxed at a special figure.

The label must mention the qualitative composition of the substance and, in the case of medicines containing heroin, the dose also.

The Ministry for Social Insurance decides whether or not to authorise the sale of the product in question.

All the advertising of the product is also controlled by the Ministry.

I should also mention that Hungary, Czechoslovakia, the Kingdom of the Serbs, Croats and Slovenes, Roumania, Poland and the Netherlands have already adopted similar measures and that other countries are on the point of doing so. I think, therefore, that there will be no insurmountable difficulty in regulating the sale of these substances by international means.

The Committee in question has expressed the opinion that an international pharmacological Secretariat will be far more qualified to study the question than the Health Section of the League of Nations, since only experts should deal with it. It will be easy to agree with this opinion on condition that the word "experts" should not be taken to mean only members of the pharmaceutical profession. The medical profession is competent to decide the therapeutic value of a patent medicine and to authorise or refuse its sale. This point of view ought to be considered as of first-class importance when authorising the sale of patent medicines. It would be most regrettable and even harmful for the solution of this problem if the framing of international regulations were entrusted to a Committee composed of manufacturers or dealers in patent medicines without representation of the medical profession.

It is therefore desirable that the Committee set up to investigate this question should be composed of members of the medical and pharmaceutical professions. It would be specially useful if the doctors representing their various countries here should express an opinion whether the examination of the international action which should be taken to regulate the sale of patent medicines is within the competence of pharmacists or of doctors or of both.

There is no doubt that the point of view adopted by the Health Committee will have a decisive influence on the Pharmaceutical Federation.

In my opinion, international regulation of the sale and control of patent medicines would certainly be much more necessary than the international regulation and unification of pharmacopœia, in view of the fact that the sale of patent medicines at the moment amounts to 60 or 70 per cent of the total sale of pharmaceutical preparations. Since these patent medicines are sold under wrapping of the factory of origin it is impossible for a chemist to know the composition or purity of the products he is selling. For this reason, pharmacopœia is steadily becoming of less importance. The control of patent medicines is therefore necessary, and, in order that it may be effective, it is indispensable that that control should be conducted by State laboratories, as is the practice in several countries.

Further, to ensure a certain international uniformity in the methods of control, an understanding between the representatives of the Committees of pharmacologists is desirable. Since several members of the Committee of Biological Standardisation are also members of the national Committees of Pharmacology, this fact might be used in order to induce a discussion of the question at the next Conference. It would be most desirable to invite the President of the International Pharmaceutical Federation — M. van Itallie — to take part in this Conference in order to ensure the co-operation of that Federation with a view to a common investigation of the question.

Professor Léon BERNARD said he was happy to see the Committee dealing with a proposal which he had presented at a previous session but which had not then been taken up by the Committee. His proposal had been considerably wider and had covered the whole field of medical charlatanism — which was well within the competence of the Committee. It was a question of

the defence of public health. There were difficulties of several kinds, and different interests were involved. It was indispensable to take up the matter and not to be deterred by its complexity, though the terms of any proposal must be carefully weighed. That problem was not merely a pharmaceutical one. The charge made against certain patent drugs was not levelled against their preparation, which was usually very satisfactory, but was directed against the way in which they were offered to the public. In this connection a purely scientific control would not be sufficient. The question was, above all, one of propaganda and education, as was shown by the example of America.

The evil arose in part from the negligence of certain doctors, who frequently relied on drugs which were recommended to them, and, in part, from the fact that the medical Press necessarily drew most of its revenue from medical advertisements. Too much insistence could not be laid upon the injury caused by advertisements in the daily newspapers. An association of American doctors had taken up the problem and had constituted a Medical Society to conduct a campaign against this evil. Interesting results had been obtained. In his opinion, it would be well to take up the proposal of Professor Knaffl-Lenz without limiting it to the technical aspects of the question. For the Health Committee this was not only a question of control; it must consider the matter from the point of view of the defence of public health.

M. VELGHE said he did not think it necessary to emphasise the importance of the question, and he associated himself with the observations of Professor Léon Bernard. An extension of the proposal, in the sense suggested by Professor Léon Bernard, would perhaps enable the Committee to take up the question. If, for example, the consequences for public health in general — of advertisements in the newspapers in regard to certain methods of treatment for venereal diseases, for instance — were considered, it would be realised that the problem came within the field of activity of the Committee. As the question was one which affected the normal progress of public healt, it was legitimate for the Committee to study means of overcoming anything which prevented progress being made.

Professor OTTOLENGHI also associated himself with the proposal of Professor Léon Bernard. He emphasised the advisability of taking up this question in connection with that of patent foods; many of them — for example, those intended for the nourishment of infants and young children — were, in reality, fraudulent preparations. In this connection, he recalled the fact that the association of American doctors had also dealt with this question.

Sir George BUCHANAN said he would like to refer to the first part of the second paragraph of Section II of the report under consideration. There was to be a Conference for the unification of potent drugs, and reference was made to a memorandum which was to be prepared by the Secretariat for this Conference. Would it not be advisable to have this memorandum drafted immediately and distributed to the members of the Committee ? The questions dealt with were in no way controversial. The memorandum would merely explain the work done by the Health Committee in regard to the standardisation of biological products and would inform the Conference of the results achieved. He hoped that the effect of such a memorandum would be that the Conference would decide not to define biological products in the pharmacopœia but would leave such definition to the Committee on the Standardisation of Biological Products.

Turning to the general question, he doubted whether the time had yet come to take up the important question of the control of patent medicines or quack remedies and advertisements. The present session was nearly at an end. The subject was extensive, and many difficulties would arise. Legislative action by the various countries would be necessary, and at present no information was available. It seemed to him that international action for the control of patent medicines and misleading medicinal advertisements was for the moment premature. International action would only be possible when the Committee saw clearly how to assist the various countries to deal with the problem themselves. Efforts made in the various countries must differ according to their legislation and habits. There was as much charlatanism in Great Britain as elsewhere, but it took a different form from that in other countries. There was, moreover, a considerable public which took the view that, out of the mass of drugs that were valueless or injurious, there might sometimes emerge excellent preparations which otherwise would never have been placed on the market. He doubted whether it was wise to begin to deal with the evil from the international side.

He was quite prepared to support the action suggested in the report of the Medical Director, namely, to distribute the document under discussion and pass it on to the Standards Committee. For the moment this appeared to be the only practical step which was possible.

Professor Léon BERNARD thought it would be advisable to take up the proposal of Professor Ottolenghi, limiting the enquiry to patent foods intended for infants.

The observations of Sir George Buchanan were very just. He thought, however, that it was necessary not only to undertake a technical examination of the regulation of the question but to look at it from all its aspects. At the end of a session, however, it was necessary for the Committee to limit itself to a decision of principle, and for this purpose to adopt a procedure already followed for other questions. One or two members of the Committee might be asked to prepare a report for the next session of the Committee. The Committee would then decide whether it was advisable to ask a Sub-Committee to undertake a detailed investigation.

Professor PITTALUGA supported the observations of Professor Léon Bernard. As regarded the proposed conference, it was necessary for the Committee to emphasise the importance of the question from the point of view of public health. It seemed that in Spain measures were about to be adopted for the official control of drugs. It would be very useful to emphasise, by means of a recommendation, the necessity for the constant attention of doctors to the matter. He therefore supported the proposal of Professor Knaffl-Lenz.

The PRESIDENT said that the desire of Professor Ottolenghi could be met by asking Professor Poulsson to present to the Conference on the Standardisation of Biological Products a report on vitamines — a matter on which Professor Poulsson was particularly competent.

M. VELGHE, replying to an observation of Sir George Buchanan, said that many countries were not entirely free to adopt the laws which they desired, in the absence of an international agreement on the matter.

He pointed out, in reply to Professor Pittaluga, that the Belgian Government had not asked the Governments to send only pharmacists to the Conference. The Belgian Government had itself appointed as representatives doctors and pharmacists. It was for the various members of the Committee to make representations to their respective Governments in the sense desired.

On a proposal of Professor Jorge, Professor Léon BERNARD suggested the use of the expression "medicinal charlatanism" instead of "medical charlatanism".

Dr. RAJCHMAN, replying to a question of Dr. Chodzko, explained that the Conference on the Standardisation of Biological Products, which was to meet in September, would include a large number of experts, in particular, Professor Poulsson himself. This Conference would be able to supply the Committee at its October session with a useful opinion.

Sir George BUCHANAN said he understood that the Conference was free to give an opinion on Professor Poulsson's memorandum if it thought fit, but that the Committee left it complete liberty in the matter.

Dr. RAJCHMAN, replying to a question of Sir George Buchanan, said that the report would be ready in two or three weeks and would be sent immediately to all the members of the Committee.

*Chapter II, Section II of the report of the Medical Director was approved,* together with the suggestions which resulted from the discussion.

The PRESIDENT, with the approval of the Committee, asked M. Velghe and Professor Léon Bernard to prepare a preliminary report on medicinal charlatanism to be submitted to the Committee at its October session.

### 145. Examination of the Report of the Cancer Commission.

The report of the Cancer Commission was read (Annex 57).

Sir George BUCHANAN submitted the following addition to the report:

> "In this connection the Commission draws attention to the fact that its enquiries have entailed the collection of valuable data, statistical and clinical, which have never before been obtained or analysed, and which, in the interests of cancer research in all countries, ought to be made available in published form.
>
> "The Commission considers that one of the principal ways in which it can fulfil its duties at the present time is by the careful compilation of these data and their inclusion in the report under preparation."

He added that the present report of the Cancer Commission was brief, as the position up to the last session of the Health Committee had been explained in detail in previous documents. The Cancer Commission had endeavoured to give effect to the results of the discussion which had taken place during the last session of the Health Committee. The question was whether it was possible to bring to a focus points of comparative enquiry in respect of which it seemed possible to reach some final conclusion. Why was mortality from certain forms of cancer greater or less in three particular countries ? The enquiry necessary to provide the answer was by no means as simple as it appeared. It had been necessary to examine several explanations and to make investigations from which new points of enquiry had emerged. It had not yet been possible to produce a report explaining the differences noted, but certain points had been examined and some progress achieved.

Good work had been done during the present session, with the assistance of a small statistical Sub-Committee, in comparing data received from different countries. The Cancer Commission now anticipated that it would be able to draw up the first and most important chapter of its report, embodying the results obtained from a study of national statistics. A study had been made of the relationship between civil status and mortality, the influence of natality on the forms of cancer under consideration, and variations according to age, etc. It was hoped that these facts would be of great use in further researches. It could now be stated that certain factors had been worked out and settled and that, in regard to other factors, certain investigations were still necessary. He was glad to note that in the budget of the Health Committee the expenses of the publication of the results of the work of this Commission had been borne in mind, particularly as the publication of tabular matter was apt to be costly.

It had unfortunately not been possible to undertake the work on racial proclivity owing to the death of Dr. Eichel; but arrangements had been made through Surgeon-General Cumming for an enquiry into the incidence of cancer in respect of various races in the United States of America.

In conclusion, he would like to pay a tribute to the assistance which had been rendered to the Cancer Commission by its present Secretary, Dr. Tomanek.

Dr. LUTRARIO said he would like to present certain observations which dealt more particularly with the origin of the enquiry. He reminded the Committee that, when the first results

of the isolated enquiries which had been made in various countries in Europe were presented to the Office international, striking differences had been noted between Great Britain, the Netherlands and Italy in regard to the incidence of cancer in general, and particularly the death rate from cancer of the breast and the uterus. It was accordingly considered advisable that a new enquiry upon a uniform basis should be conducted in these three countries into the two kinds of cancer to which he had referred, in order to ascertain, if possible, the causes of differences which were so striking.

The explanation that the statistical procedure had been liable to error had to be immediately put on one side. Statistical figures were compiled in these three countries with such care that it was readily possible to rely upon them unreservedly, making allowance in practice for slight errors which had no real influence on the results as a whole.

As regarded Italy, statistics of the causes of death were established according to the death certificates given by doctors, usually verified by the official municipal doctor. Moreover, as cancer was a disease of long duration, accompanied by long illness, it was fairly certain that the sick person, even in country districts, usually visited the doctor in hospitals, clinics, etc.

It had been thought well to make investigations in regard to the moment when a cure of the disease was sought, as, the sooner this was done, the more probable was the chance of a cure. If, in a particular country, medical aid was sought at a late stage, a higher death rate would necessarily be noted than for a country in which medical aid was sought earlier. It had been necessary to set aside also this hypothetical explanation. In Italy, women came to the hospitals at a late stage to almost the same extent as in England. Without prejudicing the final conclusions of the investigations, an enquiry conducted among the best-known specialists on the disease had shown that nearly 80 per cent of the women came to the hospital ni a condition that made an operation absolutely impossible and that about 40 per cent died while they were in hospital.

Enquiry had finally been directed to other fields, and it seemed at last that some light would be thrown on the problem. The explanation appeared to be constitutional. Statistical researches made by Dr. Eichel, based on figures collected in the United States, indicated that the sons of mothers of English or Italian nationality showed the same differences in respect of mortality from cancer as was noted in the countries of origin which the mothers had long since left. The children of the women in question, therefore, showed the same constitutional predisposition to cancer as was noted in the countries of origin. It was objected that these observations had not, perhaps, all the value assigned to them, since Dr. Eichel had dealt with a limited number of cases, particularly in respect of certain ages. Dr. Lutrario had learnt, however, that in America an investigation was being undertaken throughout the census area. If the new investigation led to the same results as those of Dr. Eichel, and especially if these results covered a certain number of years, the observations already made would be confirmed.

In regard to tables of longevity, Dr. Niceforo and Dr. Tomanek had provided Dr. Lutrario with important data. Tables relating to Italian women, as compared with British women, showed that at all ages the mean length of life of the Italian women was shorter than that of the British women and that the number of women of any age surviving in Italy was inferior to the corresponding number in England. Without wishing to draw definite conclusions from this fact, it was possible that the greater mortality among the Italian women before the critical cancer age had as a consequence the previous elimination of a certain number of women who were predisposed to cancer. As a result of this, Italian women would arrive at the critical age with greater resisting power against diseases peculiar to that age than English women. The case for the English women would be the reverse.

Care must be taken not to attribute a decisive importance to this fact in explaining the difference which had been noted. Nevertheless, it was possible to attribute, at least hypothetically, a certain part of the discrepancy — though a small one — to this difference shown in respect of the average length of life. He would add in this connection that the Medical Director had been among the first to inspire researches in this direction.

It was also possible that a high degree of fecundity protected women against the danger of cancer of the uterus, for it was beyond doubt that failure in the normal working of any organ always resulted in trophic alterations of the tissues, and it was probable that the cancerous process grafted itself upon these alterations. This would explain why, in Italian districts where the birth rate was high, cancer of the uterus was least frequent.

In regard to still-birth, it had often been noted that there was in Italy a connection between the number of still-births and cancer of the uterus, the latter being generally more frequent where still-births were more numerous. This fact would again tend to show that the condition of the uterus to which still-birth was frequently due had some connection with the origin of cancer.

These various reflections might enable the enquiry to be directed towards certain possible explanations of the differences noted between the three countries.

Other factors were at present being studied, which might help to explain regional differences in the same country. He had presented with his report diagrams which showed considerable differences as between the various provinces of Italy, both for cancer in general and for cancer of the uterus and of the breast. Attention had, for example, been drawn to a possible relation between goitre and cancer. It would be premature to draw any conclusion from the correspondence which, to some extent, appeared to prevail between the geographical distribution of goitre and of cancer. The same was true in respect of the possible relation between diabetes and cancer.

The PRESIDENT thanked Dr. Lutrario for his statement.

Dr. JITTA said he had no intention of speaking upon the substance of the question. The provisional report which he had prepared would be completed and sent to the Secretariat. He would like, as a member of the Cancer Commission, to express his gratitude to all those who had collaborated in the work of the Commission, and, above all, to its Chairman, Sir George Buchanan.

Dr. CARRIÈRE reminded the Committee that he had submitted at the last session statistics on the frequency of cancer in Switzerland. The distribution of cancer, according to the statistics which he had collected in this report, was of a marked regional character, which seemed to be due to something more than mere chance. Its distribution appeared to coincide to a certain degree with the distribution of goitre. These were interesting facts, and details concerning them were to be found in his work which had been published, except for the diagrams and graphs, in the *Bulletin* of the Office international d'Hygiène publique.

Dr. Carrière thought that the investigation should be pursued and Switzerland, with its various peoples all living together in a small country, appeared to him to offer a particularly favourable field for research. Thanks to a very small subsidy taken from the credits given to the Cancer Commission, for which he had to thank Sir George Buchanan, he had been able to continue certain lines of the investigation. He thought, however, that the work should be conducted on a fuller and on a larger scale, and he therefore drew the attention of those who disposed of the credits allotted to the Cancer Commission to the importance of this question.

Professor Léon BERNARD supported the proposal of Dr. Carrière.

The PRESIDENT thanked the Cancer Commission, and in particular Sir George Buchanan, for the work accomplished.

*The report of the Commission was approved.*

146. **Action arising out of the Proposal of the Netherlands Government concerning Quarantine Clearance of Ships: Report of Dr. Jitta on the Dutch Proposal.**

Dr. JITTA explained that the draft arrangement (Annex 58) which had just been distributed to the Committee was almost the same as that which had previously been distributed by the Medical Director. The Health Committee, on October 3rd, had adopted the report of the Commission appointed to consider this question, in which the following passage occurred:

> " The Commission considers that mutual agreements between two or more adjacent countries, or countries possessing similar public health interests, which are in close maritime communication, having as their object the prevention of needless repetition of sanitary measures taken against ships prescribed or permitted by international sanitary conventions, might be of great benefit."

The preliminary draft arrangement had been drawn up at Geneva. This draft had been revised by M. Velghe, without any alterations in regard to the fundamental principles. During an interview which had taken place at Brussels between M. Velghe and himself, the present text had been adopted. The Commission had approved this draft, and he therefore asked leave to read his report, which was the result of the decision of the Commission.

The report was as follows:

> "The Commission has examined with much interest the agreement which has been negotiated between the Netherlands and Belgium to make the health measures applied to shipping more efficacious and less burdensome to commerce. This agreement, in its final form, has been distributed to members of the Health Committee.
>
> "The Commission is of the opinion that the example given by Belgium and the Netherlands in this matter might well be followed by other maritime countries.
>
> "The advisability of adding an additional clause providing for arbitration by an International Health Organisation in the event of disagreement as to the interpretation of any article of the agreement was considered by the Commission.
>
> "It was decided that the insertion of such a clause into this particular agreement was open to objection and the proposal was not adopted."

Dr. Jitta added that, if this report were adopted by the Committee, M. Velghe and he would make the necessary representations to their Governments for the ratification of the arrangement.

Professor Léon BERNARD, referring to the two last paragraphs of the conclusions submitted by Dr. Jitta, said that he was unable to accept them. It did not seem to him possible to set on one side a recommendation for arbitration procedure, particularly when the question involved a technical organisation of the League. It might be asked whether the Health Committee ought to ratify the proposal of the Commission. It seemed to him inadmissible that the idea of arbitration within a technical organisation of the League should be set on one side.

If the Committee—as he hoped it would—decided to take into consideration arbitration procedure, to what organisation would the arbitration be entrusted ? Two organisations were possible, namely, the Office international at Paris and the Health Committee of the League. He did not wish to express any opinion as between them.

Dr. CHODZKO raised a similar question. Doubtless the arrangement was a matter for the two Governments which were interested, but, as a report had been submitted to the Committee, the latter must take a decision and assume responsibilities. He recalled the fact that, at previous sessions, the Committee ha dapproved draft model conventions for the sanitary control of navigable waterways. In these drafts the principle of arbitration had been adopted. The same principle

was also embodied in the four resolutions of the Warsaw Conference, and several States of Central and Eastern Europe had concluded agreements between themselves on the basis of the resolutions of that Conference.

The principle of arbitration was embodied in all these agreements, except the agreement between Poland and Soviet Russia. The Warsaw Conference had included delegates from Belgium and the Netherlands. Was it admissible that the same obligations were not regarded as binding on all parties ? The States of Central and Eastern Europe in question would find themselves in a very delicate position if they learned that the Health Committee had agreed to set aside the principle of arbitration.

Sir George BUCHANAN said he was inclined to support the omission of the reference to arbitration. The agreement in question was one between two neighbouring States. These States did not propose to insert an arbitration clause, and it was not for the Health Committee to suggest its inclusion. It might be said that this agreement should not be regarded merely as an agreement between the Netherlands and Belgium but that it was intended to be a model convention which would serve as a basis for the conclusion of agreements between other States. From this it might be argued that it was right and proper for the Health Committee to suggest the insertion of an arbitration clause. A difficulty, however, arose as to which should be the authority called upon to arbitrate. Under the International Sanitary Convention, the arbitrating body was the Office international d'Hygiène publique and not the Health Committee of the League of Nations. There had been a long discussion of the question, and the difficulty had been fully realised by the members of the Committee. If it were the object of the Committee to set up a model convention, it would be unwise to recommend the insertion of a clause which might produce difficulties and be subject to controversy.

He would accordingly suggest that Dr. Jitta should omit the last paragraph of his report. It was not for the Health Committee to suggest that an arbitration clause should be inserted. If the contracting parties desired such a clause, they would put it in the agreement on their own initiative.

Professor JORGE thought there was a misunderstanding. The agreement involved was a model convention, which was to form an integral part of any bilateral sanitary convention. Certain members of the Commission had not thought it necessary to introduce the principle of arbitration into such a convention. The interested parties would be free to introduce it if they thought fit. It was doubtful whether, in the general convention to be framed, these principles would be adopted. Who, for example, would dream of questioning the right of the United States to exclude from their territory undesirable immigrants ?

Dr. RAJCHMAN thought that the question at issue was very important and that it lay at the basis of the League of Nations. In principle, the Health Organisation was not called upon to intervene in respect of a bilateral agreement. In the present case, however, the two interested countries had submitted a draft to the Committee for its opinion and this draft was to serve as a model for other conventions.

He reminded the Committee of the history of the question, so far as the Committee was concerned. The Committee had been unable to comply with the request from the Netherlands Government for the elaboration of an international agreement. Belgium and the Netherlands had therefore taken the initiative themselves and concluded a bilateral arrangement, which came within the framework of the International Sanitary Convention. A similar question arose in the case of the bilateral agreements concluded after the Warsaw Conference.

An appeal had been made to the Health Committee, in the first place, by the Latvian Government, which, after having concluded the agreement with Poland, had asked the Council of the League whether the Health Committee could serve as an organ of conciliation and mediation. The Council had invited the Committee to frame the procedure.

He would remind the Committee that the draft of a model convention for navigable waterways had been sent to the Office international for transmission to the Governments. It would be discussed at Paris in the following week. This draft contained the provision to which Dr. Chodzko had alluded. It was necessary to look carefully at the text. There was here no question of an arbitral sentence to be pronounced but of a procedure of conciliation and mediation.

He would venture to draw the attention of Professor Jorge to the fact that it was only since the institution of the League that it had been possible to introduce into a convention an article providing a procedure of this kind in the event of a dispute and that this had been one of the great achievements of those who had created the League of Nations.

The question arose whether the organisation in question should be the Office international or the Health Committee. At the time of the Warsaw Conference, the existing relations between these two organisations did not prevail. The Permanent Committee of the Office international had since become the Advisory Council of the League organisation, and it seemed possible to find a solution on this basis.

He wished, in conclusion, to draw attention to the emphasis with which the representative of the British Empire, at the last session of the Council, had declared that Great Britain would always remain devoted to the principle of arbitration. This declaration had been unanimously approved by the Council.

Dr. CHODZKO did not think that the solution proposed by Sir George Buchanan was adequate. It would therefore be necessary to reject the report as a whole.

After further observations by Professor JORGE and Professor Léon BERNARD, M. VELGHE said that he thought he was able to present a solution which would be acceptable to all his colleagues. The draft scheme before the Committee was not the text of an agreement between two

Governments but the personal work of Dr. Jitta and of himself. It had been elaborated in conformity with Article 41 of the Convention of 1912. This Convention did not contemplate arbitration. This, however, was not the consideration which had deterred him from embodying the principle. He had been deterred by a wish to avoid any difficulty as between the Health Committee and the Permanent Committee of the Office international. Without requiring the Committee to choose between the two organisations, he proposed that the report of Dr. Jitta should be amended to read as follows:

> "The Health Committee has examined the Agreement between the Netherlands and Belgium, which, in conformity with Article 41 of the 1912 International Sanitary Convention of Paris, has been drafted to render sanitary measures relating to navigation more effective and less burdensome to commerce.
>
> "The Committee considers that the conclusion of agreements of this nature may be recommended to other maritime countries.
>
> "Moreover, the Health Committee holds that it would be opportune to add to this Agreement a clause providing for recourse to an International Health Organisation for conciliation in case of difference arising in the interpretation of articles of this Agreement."

In this way, the Committee, as holding its authority from the League, would be proclaiming the advisability of resorting to arbitration, but would leave to the interested countries the responsibility of deciding as to the choice of the arbitral organisation.

Dr. TSURUMI said that arbitration procedure was in conformity with the spirit of the League and that an arbitration provision was therefore appropriate in a convention drawn up under the auspices of the League of Nations. He would remind the Committee that such a clause had been inserted in the International Opium Convention. He was in favour of retaining the recommendation for an arbitration clause.

Sir George BUCHANAN thought that the formula proposed by M. Velghe adequately met the case. The objections raised in the Committee had not been objections to arbitration. These objections had been raised because certain members of the Committee did not wish to endorse a document that would give rise to difficulties. These difficulties were, he thought, successfully avoided in the text suggested by M. Velghe.

Professor JORGE said he accepted this proposal as a useful suggestion but did not agree that it constituted a moral obligation or that it embodied a doctrine.

Dr. JITTA said he associated himself entirely with the words and the proposal of M. Velghe.

*The text proposed by M. Velghe was unanimously adopted.*

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## SEVENTH MEETING

*Held at Geneva on Friday, April 24th, 1925, at 5 p.m.*

Present: All the members of the Committee, with the exception of Dr. Chagas, Surgeon-General Cumming, Dr. Alice Hamilton, Dr. Granville and Dr. Mimbela.

### 147. Annual Report of the Health Committee.

M. VELGHE said that the Bureau had considered suggestions from Sir George Buchanan to the effect that an annual general report on the activities of the Health Organisation should be published.

After careful examination of the proposal, the Bureau had unanimously decided to submit the following resolution to the Committee for its approval:

> "The Health Committee, having studied the most appropriate method for the preparation and presentation of an annual report which would give a comprehensive account of its activities, decides that this report should relate to the year ending December 31st and should be based on the resolutions adopted by the Health Committee at its sessions held during that year.
>
> "Unlike the report which the Medical Director prepares for the Assembly, which will be submitted to the Bureau for approval, the annual report shall be published, distributed and placed on sale as soon as practicable at the beginning of each year, and its consideration shall be inserted in the agenda of the next following session of the Committee."

There were two essential points to which he desired to draw the Committee's attention. The annual report would be kept separate from the report to the Assembly, the draft of which would be approved by the bureau.

Secondly, the annual report would appear at the beginning of each year, and be distributed with the least possible delay. It would be submitted to the Health Committee at its next session.

*The resolution was unanimously adopted.*

### 148. Position in the Far East and the Question of the Revision of the International Sanitary Convention of 1912.

Dr. JITTA said that the position of the Far East question wasas follows. The Office international at Paris had been carrying out certain preparatory work with a view to the revision of the Sanitary Convention of 1912. The Health Committee had also examined the question and had despatched a representative to the Far East in order to see what measures were taken in Far-Eastern ports to prevent the spread of infectious diseases. Dr. Norman White, who had carried

out the mission, had reported to the Committee and had submitted a draft Convention which had been circulated to the various States for their comments. Only five replies, namely, from the Governments of China, Japan (Annex 59), New Zealand, Australia and the Netherlands had so far been received (Annex 59 *a*). The reply of the Indian Government was on its way. In view of the fact that so few replies had been received, Dr. Jitta thought it would be difficult for the Committee to discuss the draft Convention drawn up by Dr. Norman White until the views of Governments were known.

Moreover, at a Pan-American Conference at Havana, a Sanitary Convention had been adopted for use in Latin America, the terms of which differed somewhat from both the Paris Convention and the new draft Convention proposed by Dr. Norman White. He thought, however, that, with care, the draft Convention could be adapted and that the essential principles contained in the Pan-American Convention could be included in the new Convention.

It was therefore necessary for the Committee to have time to examine the three texts; this they could do in Paris, whither certain members were proceeding immediately for a meeting of the Permanent Committee of the Office international.

The question of the convening of a Conference by the French Government for the purpose of revising the Paris Convention was also to be discussed by the Office international, and, while that Conference should not be postponed indefinitely, Dr. Jitta thought that the Permanent Committee could fix a definite date after it had examined the draft Conventions more thoroughly.

In view of the fact that Dr. de Vogel, who possessed expert knowledge of the position in the Far East, was at Geneva, he asked that an opportunity should be given for the Committee to hear his views.

(At the invitation of the PRESIDENT, Dr. de Vogel came to the Committee table.)

Dr. de VOGEL said that he would indicate in brief the reasons why certain measures of the Paris Sanitary Convention had given rise to difficulties in the Far East. The Paris Convention was based on the perfectly sound principle that every country was responsible for its own public health. This meant that each Government had to take what measures were necessary to ensure good sanitary conditions in the ports of its country. Such a principle was easily applicable in Europe, for it was a highly developed continent possessing a vast network of railways and canals and a comparatively short sea-coast, which meant that the volume of traffic was concentrated at certain fixed points, where health control was easy.

The position in the Far East, however, was totally different. Far-Eastern countries in general possessed huge sea-boards and very few railways or means of internal communication. Consequently, all the traffic went by sea and there were a very large number of ports of all sizes. This was especially the case in the Dutch East Indies, which possessed no less than 275 ports at which steam-driven vessels touched. It was impossible for the administration of the Dutch Indies to equip all these ports with complete installations to render them at all times safe within the meaning of the Convention. It was essential to have some system whereby ships starting from an infected port could be properly controlled. The Consular signature could, for instance, be verified by a competent doctor attached to the Consulate of the country of destination. To explain his meaning, Dr. de Vogel gave the following example.

At Singapore, the harbour was divided into two parts, Tanjong Pagar and the Roadstead. Considerable transhipment of rice took place in the Roadstead; this rice came from depots situated on the banks of the Singapore river, where rat plague was often present. The rice was taken, without any precautions, in lighters to ships, which distributed among various small ports possessing no prophylactic equipment whatever as protection against the danger which threatened. In order to prevent the spread of plague by this means, it would be necessary to close these ports to traffic coming from Singapore; such action would hinder navigation very seriously and would result in famine for the people living in these islands, several of which did not produce rice. The only method of avoiding this would be the special deratisation of the dangerous cargo by fumigating each rice-loaded lighter before transhipping its cargo to the seagoing vessel. This would be a sufficiently effective method, but in the circumstances it could only be carried out in the port of departure.

Further, when plague was carried to one of the non-equipped ports of the Archipelago, it was quite possible to send doctors and deratisation apparatus to that port and thus take effective measures to prevent outgoing ships from being a source of danger to their ports of call. This could be done, even though the ports of call did not possess an effective statistical organisation or a satisfactory water-supply.

Dr. de Vogel then passed to the point regarding which he had been accused of criticising Dr. Norman White's report; it seemed to Dr. de Vogel that the scheme proposed by Dr. Norman White confused, in regard to the classification of ports, the treatment to be applied to vessels and the system of health protection to be employed for the inhabitants of the ports themselves.

The division of ports into first, second and third classes was based, in the first place, on the health organisation which they possessed for the protection of their inhabitants against disease. He had nothing to say against such a basis for the classification, but it was essential to insert a provision in the Convention whereby it would be unnecessary for an infected vessel to call at a first-class port with a view to undergoing the necessary disinfection because such a port had a satisfactory health organisation for its inhabitants. The ship ought to have the right to make for a second- or even a third-class port, provided that that port possessed sufficient equipment to deal with a ship in respect of the disease for which she was considered to be dangerous.

If a vessel could only obtain *libre pratique* in a first-class port, the shipping commerce of the Dutch East Indies would be ruined because of the great distances which ships would have to go in order to get the *libre pratique* which was indispensable to them before entering a port non-equipped for dealing with ships.

At the moment, the practice in force in the Dutch East Indies was to send doctors and derati-sation apparatus. This practice should be approved, or at any rate not interfered with, by an international convention. Consequently, Dr. de Vogel hoped that, in a general way, certain considerations to be found in the Annex to the Convention and satisfying the demands of the Dutch East Indies would be given a place in the text of the Convention itself.

The replies which had up to that moment been received from Governments seemed to Dr. de Vogel to show that they had not sufficiently examined the draft Convention proposed by Dr. Norman White as a whole, and that they had confined themselves to the examination of mere questions of detail. As a matter of fact, he thought it was quite impossible to reach any definite conclusion from the replies from the Governments for the following reason. If each interested Government were approached separately, it would appear to be difficult for the desired end to be attained. The proper procedure would seem to him to be to consult the common views of all the countries of the Far East concerned, after the scheme proposed by Dr. Norman White had been submitted to an International Conference at which the responsible heads of the different health services of the countries concerned could meet in a town in the Far East in order to discuss it.

The Congress of the Tropical Medical Association of the Far East, which had met at Saigon in 1913, shortly after the signature of the Paris Convention of 1912, of which certain provisions were not satisfactory from the point of view of the Far East, had proposed that such an International Conference should be summoned. Dr. de Vogel thought it was a pity that this plan proposed by the countries concerned had not been followed, since it had already been marked out.

He feared that to proceed otherwise would be to delay for several years the finding of a solution for the problem of a suitable Convention for the Far East.

The PRESIDENT, on behalf of the Committee, thanked Dr. de Vogel for his statement and Dr. Norman White for the manner in which he had accomplished his mission.

M. VELGHE said that, if he had understood Dr. de Vogel rightly, the administration of the Dutch East Indies desired three lists of ports to be made, the health installations of which could deal with one of the three diseases (plague, cholera and yellow fever) mentioned in the Convention of 1912.

This did not seem to him to raise any question of principle, and he thought that in the revision of the Convention satisfaction could be given to this point of view. It had always been a cardinal principle that the country of the port of arrival should pay particular attention to the measures taken in the port of departure to secure the health of a vessel.

Dr. TSURUMI said that the Japanese Government had already submitted a reply concerning the draft Convention of Dr. Norman White. He had now received instructions from his Government to amplify certain points in that reply. He had accordingly communicated to the Committee a revised text.

Dr. NOCHT asked whether he was right in understanding that the administration of the Dutch East Indies, in order to disinfect ships arriving at small ports not possessing the necessary permanent apparatus, sent a travelling equipment and staff to deal with the problem.

Dr. DE VOGEL replied in the affirmative. It was impossible to equip fully 275 ports and, if a ship were compelled to make use only of first-class ports, the trade in the Dutch East Indies would be gravely impeded, since the great distances made it impossible for a ship not to touch at various small ports, of which there were a large number.

M. VELGHE saw no difficulty in satisfying the Dutch Government on the various points raised by Dr. de Vogel. It would merely be a question for careful examination when the Convention was revised.

In regard to the Japanese Government, it seemed that this Government did not desire that the classification of ports according to mortality statistics of infectious diseases should be included in the Convention. Moreover, the attitude of the Japanese Government showed that it would be easy to reach an agreement in the Conference to be called to revise the Convention.

Dr. TSURUMI made the following statement:

In order to find a simple solution of the complicated problem of quarantine measures in the Far East, where sanitary conditions are quite different from those of Europe, it would perhaps be more expedient to follow the example set by the Pan-American Sanitary Conference which met at Havana last November than to draft a sanitary convention which would deal largely with European conditions. The Pan-American Conference has drawn up a sanitary convention which is, in many respects, a remarkable document, embodying many admirable and novel features. It would therefore be far simpler for us if we were to draw up an agreement which applied only to the existing conditions in the Orient.

We unanimously expressed this desire at Singapore at the Fifth Congress of the Far Eastern Association of Tropical Medicine in 1923. I had the pleasure of participating in the work of this Congress and was convinced that this was the opinion held by the representative body of those medical experts who were, in a large measure, directly responsible for public health in the Far East. I have already called your attention to this point at the second session of the Health Committee, which was held in Paris last May.

As you may remember, it was stated in one of the resolutions that " circumstances in the Far East demand quite a different quarantine procedure from that of Europe. It is therefore desirable that a separate agreement should be drawn up to govern quarantine regulations in the Far East so as to allow of the necessary co-operation between the different Far Eastern countries."

In this, the present situation in Japan was realised. On the attitude of the sanitary authorities of the Japanese Government towards the International Sanitary Convention, I need not dwell here, since it speaks for itself.

This attitude, however, has been changed quite recently, and it appears that the Japanese authorities are willing to accept the invitation of the French Government to attend the Conference, provided that the basis for the discussion does not exclude that point of view on which the Japanese authorities feel they have a right to be heard. If they are assured that their case will have a fair hearing on its merits, they will not only accept the invitation but will also take part in the fullest manner in the international effort to draw up an agreement. Should a satisfactory agreement be reached, Japan, of course, would not insist on a separate convention in the Far East. The only remaining point, then, to be considered is the insertion of a special chapter in the International Convention which will govern the sanitary measures in the Far East.

Since Japan had no opportunity to express her views on this point till long after the draft Convention had been completed, it is natural that she should wish to have them discussed before the Conference actually meets, in a preparatory committee, as well as with other Powers. This will save time and increase the harmony of an international gathering.

In proposing this scheme, I can assure you that I am actuated only by the desire to co-operate heartily with the other members of the Committee and have no wish to obstruct their plans. If there are other suggestions which will give better results for the Paris Conference, I shall have pleasure in considering them without any prejudice.

In conclusion, Dr. Tsurumi thanked M. Velghe for his observations, which showed that the Office international was animated with the greatest good-will towards the Japanese Government. He would not fail to communicate this to his Government.

Dr. Norman White said that he had had several unofficial discussions during his mission at Singapore concerning the different draft Sanitary Conventions. In regard to this matter, delegates had not represented their Governments and had consequently spoken quite freely. He gathered the impression that most of the delegates considered that the Pan-American Code, with certain modifications, might suitably be adapted to the needs of the Far East. In the Far East, it was necessary to concentrate sanitary effort at the port of departure, and the effective health equipment of large ports was of fundamental importance.

Dr. de Vogel had explained the peculiar difficulties confronting the Dutch East Indies, but had also emphasised the necessity of concentrating efforts in the port of departure. He also apparently thought it necessary to adopt a classification of ports as a basis for quarantine procedure.

Dr. de Vogel said that it was essential to have, in any classification of ports, a definition which would make it possible to determine whether a port was dangerous or not. It was possible, for example, for cholera to be raging in a port and yet for that port not to be dangerous on account of its health equipment. The Paris Convention of 1912 concentrated rather on the port of arrival than on the port of departure, a fact which raised great difficulties in the Dutch East Indies.

Dr. Jitta said that, as a result of the exchange of views, the position had been cleared up. He thanked Dr. de Vogel, whose great knowledge of the Dutch East Indies had enabled him to speak with authority. The Permanent Committee of the Office international would discuss the replies of the Governments when they had been received and the whole matter would be re-examined most carefully at a later stage.

He thanked Dr. Tsurumi for his statement, which showed the good-will of the Japanese Government.

The President proposed that Dr. Jitta should be asked to call a meeting of the Commission on the Far East to continue the discussion in Paris.

*This proposal was adopted, and the Committee decided to transmit the proposals of the Japanese Government to the Office international for examination.*

Dr. de Vogel withdrew.

149. **Report of the Statistical Experts on the Definition of Still-Birth.**

The President proposed that the report should be sent to the statistical departments of the various countries for a technical opinion and that the Committee should postpone any decision until its next session.

Sir George Buchanan said that the only report upon which a decision was necessary now was that relating to the definition of " still-birth " (see Appendix 2 of Annex 47). It seemed to him that to send a report containing such a decision to the statistical departments of the various countries would be a mistaken procedure. Bureaux of vital statistics were not competent to define " still-birth ". A medical definition was necessary, and the question had therefore been submitted to a Commission which included an eminent obstetrician and took account of the physiological considerations involved. This Commission had presented a full report containing an agreed definition. All that was now required was to decide how best to give practical effect to that definition by obtaining its adoption on a large scale. Governments themselves would have to take the decision. If they adopted the new definition, it might entail in certain instances considerable administrative changes. The Committee should therefore send the definition formally to Governments for their observations or, if that procedure did not commend itself to the Com-

mittee, the definition should be sent to the Permanent Committee of the Office international asking it to obtain the observations of Governments.

*The Committee decided that the report of the Statistical Experts containing the definition of " still-birth " should be sent direct to the Governments for their observations.*

150. **Question of the Appointment of a Malariologist to organise a Campaign against Malaria in Turkey : Request from the Turkish Government.**

Dr. RAJCHMAN read a note (Annex 52 *b*) from the Turkish Government asking that the Committee should recommend a well-known specialist on malaria to set up in Turkey an organisation to combat malaria and, if need be, to inspect the districts where the disease was rife.

*The Committee adopted the following resolution :*

" The Health Committee, having taken cognisance of a request of the Turkish Government for the recommendation of a competent malariologist for the purpose of organising a campaign against malaria in Turkey, decides to delay any decision until further information has been received from the Turkish authorities."

151. **Appointment of Three European Medical Officers as Health Advisers to the Turkish Government.**

Sir George BUCHANAN said that the Committee was still awaiting information in regard to the duties of the three European medical officers as health advisers to the Turkish Government. He understood that, should the request for their appointment arrive in the interval between sessions of the Committee, the President would consult certain members of the Committee in regard to the action which should be taken on the information supplied.

M. VELGHE thought that it would be difficult, if not impossible, for the President to appoint such persons, since the question of nationality would arise, which could only be settled by the Committee.

The PRESIDENT agreed. The most that he could do between the sessions of the Committee would be to undertake the preliminary work in connection with the appointment of the three medical officers, but the final decision would have to be taken by the Committee itself.

152. **Resolutions adopted by the Conference on Emigration and Immigration held at Rome in May 1924.**

Dr. RAJCHMAN said that this question raised certain difficulties. The question of emigration was of great interest to the International Labour Office and a Mixed Conference had investigated the whole question, including the health measures to be applied to immigrants. A series of resolutions had been adopted, most of them unanimously. They were mostly of a general nature, except No. 16, which was as follows:

" The Conference,

" Considering the utility of making a systematic collection of the sanitary regulations of the different countries concerning the departure of emigrants and the arrival of immigrants:

" Expresses the wish:

" (*a*) That the different countries should come to an agreement for publishing, as far as possible on uniform lines, a collection of their respective sanitary regulations in force regarding emigration and immigration;

" (*b*) That, by means of these collections and on the basis of the laws and regulations included therein, preparations should be made for compiling an International Sanitary Code for Emigration and Immigration, which will co-ordinate, according to general uniform principles, the sanitary laws and regulations governing the migration of workers and their families from one country to another."

This resolution was of practical and immediate importance. In the present Sanitary Convention, no special provisions had been made for emigrants. It might therefore be thought necessary that, in the revised Sanitary Convention, a special article to cover the case of emigrants should be inserted. If the Committee so desired, the Secretariat could proceed immediately with the work entailed under the terms of the resolution, while the Office international, which was revising the Sanitary Convention, could consider whether or not a special article to deal with emigrants should be inserted.

Dr. LUTRARIO agreed with Dr. Rajchman that the question raised by the resolution in question was of great importance. Other resolutions contained in the Final Act of the Rome Conference were also of importance, notably Resolution No. 13 of the first section, No. 9 of the second section and Nos. 6, 10 and 13 of the third section.

Among these different points some were more properly within the province of the International labour Office. But there were, nevertheless, some which were directly within that of the Health Committee.

Among the latter, he ought, in the first place, to draw attention to the point contemplated in the draft resolution. The expediency of an early publication by each country of its collected health regulations with regard to emigration and immigration was evident. Taking these regulations as a basis, it would be possible to begin the study, in accordance with uniform general principles, of an international code of health regulations affecting the external movements of the population; this code would be a standard for measures of health protection applicable to emigrants and their families.

The second point was the necessity for a single type of health certificate and a simplification of the procedure respecting the documents and visas accompanying the certificate. In this connection, the desire of the Rome Conference was about to obtain complete satisfaction, since the Paris Committee had already suggested a single type of health certificate which fulfilled all the necessary conditions by being not only rational but simple and uniform.

The third point to which he desired to draw the attention of the Committee was connected with national censures, in which — according to the Rome resolution — attention should be paid to the distribution of emigrants of different nationalities within the territory of the country, and to the composition of each group of foreigners as regards sex, age, civil status, profession, etc. These data would be of particular interest from the point of view of demography, health and epidemiology alike.

To form an idea of the essential importance of such information, it would be sufficient to call to mind the most interesting researches, to which reference had recently been made in the Committee, which had been made respecting the incidence of cancer among the emigrants of different nationalities — British, Dutch and Italian — at the last United States census. The investigation for which the Committee was indebted to the late Dr. Eichel would not have been possible if attention had not been paid in the census to the demographic data respecting the different nationalities. The importance of this source of information was therefore clear. He hoped that the draft resolution might be amplified in accordance with the explanations just given.

Sir George BUCHANAN said that he was not well acquainted with the resolutions adopted by the Conference. The question before the Committee was whether it should undertake a detailed investigation of the rules governing emigration. If the Committee decided to do so, it should follow the normal procedure and begin by circulating a questionnaire on the subject to Governments. To decide whether the Committee should take up this question, however, was another matter.

*The Committee decided to place the question of emigration on the agenda of its next session and to send a questionnaire to Governments on the subject. It further decided to refer to the Office international the question of the insertion of a new article dealing with emigration in the revised Sanitary Convention*

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## EIGHTH MEETING

*Held at Geneva on Saturday, April 25th, 1925, at 10.30 a.m.*

Present: All the members of the Committee with the exception of Dr. Chagas, Surgeon-General Cumming, Dr. Alice Hamilton, Dr. Granville, Dr. Mimbella, Professor Pittaluga and Dr. Raynaud.

### 153. Examination of the Report of the Tuberculosis Commission.

The PRESIDENT informed the Committee that Dr. Tsurumi, Chairman of the Tuberculosis Commission, had asked Professor Léon Bernard to draw up a report on this question.

Professor Léon BERNARD read his report (Annex 60).

In reply to Sir George BUCHANAN, Dr. RAJCHMAN informed the Committee that the estimates for the work of the Tuberculosis Commission amounted to 20,000 francs for the present year and to 30,000 francs for next year.

Sir George BUCHANAN said that the proposals before the Committee appeared to go right back to the position as it was when first this question was raised. The proposals intimated that there was a vast field for comparative study, but the nature of the enquiries to be pursued and what officials might be necessary for its conduct were questions which were left entirely open. No directions were given for the work. This position would probably be rather embarrassing to the Secretariat. Would it not be well to give a more precise definition to the enquiry and to ask the Secretariat to obtain material which would enable the Committee to decide what particular points should be more closely investigated? The Committee might ask Dr. Biraud to pursue the question of the relative importance and practicability of various lines of enquiry, and the Committee, when it met in October, would then be enabled to define and limit the field of investigation. Dr. Biraud could work to this end in collaboration with the Secretariat and the President.

Dr. TSURUMI thanked Professor Léon Bernard for his report. He understood that, though in some countries the mortality from tuberculosis was declining, in others it was stationary or

increasing. A study of the facts was of great importance for the latter countries, and he was glad that the Committee had decided to continue its investigations. The position as to the relation between infantile tuberculosis and the milk supply was somewhat different in Japan from the position in Europe, and he would communicate a memorandum on the subject to the Committee at its next session.

The PRESIDENT reminded Sir George Buchanan that he had asked to be replaced on the Tuberculosis Commission by Dr. Greenwood, who had accepted the proposals contained in the report of Professor Léon Bernard.

Professor Léon BERNARD said he must oppose the proposal which Sir George Buchanan had just made. In October last, the Committee had decided upon a preliminary enquiry into the questions in order to ascertain whether they should be taken up. The report of Dr. Biraud, which embodied the results of this preliminary enquiry, had been discussed, not only by the Commission, but at a plenary meeting of the Committee, and Sir George Buchanan had taken part in these discussions. The Committee had decided that the enquiry could and should be undertaken and had appointed a Commission for that purpose under the chairmanship of Dr. Tsurumi. The decisions of this Commission were based on the discussions which had taken place at the plenary meeting. Dr. Greenwood, for example, had, at the plenary meeting, favoured partial enquiries, whereas Professor Léon Bernard had favoured general enquiries. The Commission had decided that it would depend on the countries and on the circumstances of the case whether partial or general enquiries should be instituted. This was the basis on which it was proposed to work.

If now it were requested that a new preliminary report should be submitted later on to the Committee, the Committee would merely be marking time and would find itself in October in exactly the same position as at the opening of the present session. It was clear that the Commission could not at present produce results but could only indicate methods of investigation; owing to the complexity of the problem, it was necessary to leave to the Secretariat a certain degree of freedom.

In this connection, he thought it advisable to insist that the Committee should not on every occasion assume to itself the duties of control. It must have confidence in the Secretariat or no work could possibly be done either during the session or outside the session. Too much time was lost in discussing phrases and questions of procedure, while so many important tasks were calling for the attention of the Committee. The Committee must agree as to the principles and methods to be followed and rely for execution on the Secretariat and its collaborators.

Sir George BUCHANAN said he did not regard his suggestion as any reflection upon the competence of the Secretariat. The Secretariat had asked to be directed and he thought that it was the object of the Committee to give this direction. The question whether it was better to investigate such matters through the Secretariat from Geneva or otherwise was of too great importance to be discussed at that moment.

He would merely point out that his request for time to consider the best method of approaching an enquiry into diseases of this nature was in no way intended to cast any reflection on the Secretariat.

This was not a mere matter of procedure, but a very practical question.

The next report to be presented to the Committee should relate to some special point in regard to which the procedure to be followed was definitely known. Dr. Biraud had recently come to London and had there received all the assistance and advice that could be given, and any investigator who came to London upon a similar mission would always be welcome. But while the British Ministry of Health and the medical authorities in his country were most willing to assist in any enquiry the object and limits of which were known, they did require some indication of what was being undertaken.

He would propose that, as soon as the Secretariat had decided that it was possible to concentrate upon the study of one or two particular points, and when it was prepared to suggest the procedure which should be followed in regard to each of these points, a communication should be sent to members of the Health Committee. The next report to the Committee in October would then show how far progress had been possible in regard to these points.

Professor OTTOLENGHI asked permission to remind the Committee that the Tuberculosis Commission, after having drawn the attention of the statisticians to the question to be studied, had deemed it necessary to leave them the widest discretion, as they alone were in a position to decide, after an examination of the figures, in what direction it was necessary to advance. It was impossible, either now or in a month's time, to inform the statisticians that they must deal with this or that particular subject. It would be mere loss of time to attempt to provide the Committee with preliminary information. In October, those who were entrusted with the enquiry would place certain elements before the Committee and that would be the best moment for the Committee to decide as to its future work and to discuss the problem thoroughly.

Sir George BUCHANAN said that he had no objection to this procedure.

Dr. RAJCHMAN asked permission to elucidate the question from the point of view of procedure, in order that an accurate record might be made for the Minutes. The Committee had decided to appoint a Tuberculosis Commission; this Commission being appointed, the Secretariat would keep as closely as possible in touch with it, as was done in the case of the Malaria Commission and all other Commissions except the Cancer Commission. The Cancer Commission worked under special conditions. Of the five members composing it, three — namely, the British, Italian and Dutch members — had to undertake an enquiry themselves in their own countries. This

Commission therefore comprised two groups — the three members in question and the Commission as a whole, which discussed the enquiry to be undertaken in the three countries.

It followed that except in the case of the Cancer Commission, it was the duty of the Secretariat, when the Health Committee appointed a Commission, to continue its investigations in agreement with the Chairman of the Commission. The Secretariat would, with the permission of the Health Committee, continue to follow this procedure.

The PRESIDENT asked the Committee whether it approved the report of the Tuberculosis Commission.

Sir George BUCHANAN said that as he had not been able to read the text either in English or in French and had only heard the report that morning in one language, which was not his own, he would ask to be excused from voting.

Professor Léon BERNARD explained that he had been under the impression that Dr. Tsurumi, Chairman of the Tuberculosis Commission, had asked him to prepare his report for the following session, and that it was only at the last moment that he had found it necessary to draft the text which had just been read. He had not had time to distribute copies to the members of the Committee.

Dr. CHODZKO said that, wishing not to prolong the discussion after the numerous speeches which had been made, he would prefer to abstain from voting.

The PRESIDENT *declared the report to be adopted,* with the two reservations which had just been made.

### 154. Adoption of the Report of the Medical Director.

The PRESIDENT reminded the Committee that it must take a decision in regard to the report of the Medical Director as a whole. This report had been examined in all its details.

*The report of the Medical Director was unanimously adopted.* (See Resolution No. XXV, Annex 62.)

### 155. Report of Dr. Gilmour on Health Conditions in Persia.

The PRESIDENT reminded the Committee that it had to take a decision on the report which had been submitted to the Bureau of the Committee by Dr. Gilmour on health conditions in Persia.

Dr. RAJCHMAN read the resolution on the report of Dr. Gilmour which the Bureau of the Committee proposed for adoption by the Committee.

Sir George BUCHANAN noted that the text of the resolution did not indicate that the action taken by the Committee was the result of a request from the Persian Government. He thought that this should be mentioned in the resolution. He also considered that the adoption of health measures should be recommended to the Persian Government in a rather more tactful manner, at least so far as the English text was concerned.

The PRESIDENT said that the text of the resolution would be amended in conformity with the suggestions of Sir George Buchanan.

*The resolution was adopted in the following form:*

> "The Health Committee has studied with much interest the report which Dr. Gilmour has presented on the sanitary conditions in Persia. This report is the result of a survey undertaken at the request of the Persian Government addressed to the League of Nations. The Committee is impressed by the difficulty and importance of the health problems of that country, notably with regard to malaria.
>
> "The Committee recommends to the Council of the League of Nations that the report be forwarded to the Government of Persia, which will find in it indications of the lines along which sanitary amelioration could profitably be carried out.
>
> "It considers that the Government of Persia, in the interest of its country, would be well advised to take steps to institute a modern system of health surveillance on its more exposed frontiers. The development of municipal health organisations should likewise be encouraged, and with this object in view the Health Committee recommends that facilities be given to enable a medical representative of the Municipal Health Service of Teheran to undertake a study tour for a period of five or six months in certain selected Western States where efficient municipal health activity has been developed."

### 156. Report of Dr. Haigh on Health Conditions in Albania.

The resolution proposed by the Bureau of the Committee on the report of Dr. Haigh was read.

Sir George BUCHANAN thought it would be well to mention, in the text of this resolution, as in the previous resolution, that the proposals of the Committee were the result of a request from the Albanian Government.

*The resolution amended in this sense was adopted as follows:*

> "The Health Committee, having taken note of the recommendations in the report by Dr. HAIGH relating to the enquiry which is being carried out in accordance with the request addressed by the Albanian Government to the League of Nations, adopts the following conclusions:

"1. The recommendations of Dr. Haigh as to the prime necessity of an efficient organisation of the Civil Services, of Public Health and of Provincial and Municipal Hygiene *are essential*, and, although these imply a complex political and administrative task, they should be applied as soon as possible, in order that an effective campaign may be carried out against malaria and all other infectious diseases.

"2. A campaign specially directed against malaria can nevertheless be commenced without waiting for the application of such complex reforms, and to this end the advice and suggestions contained in the report of Dr. Haigh should be taken into consideration. The preliminary legislative measures should be limited to matters strictly essential for the anti-malaria campaign without complicating excessively the legislation of a country whose administrative organisation has yet to be created. Even regulations regarding anti-mosquito measures should not be applied without a preliminary attempt to obtain the co-operation of the inhabitants and professional classes.

"3. The programme of a concrete campaign against malaria such as is contemplated in the suggestions contained in the report can serve at the same time as a starting-point and a basis for all the sanitary organisations of the country.

"4. The Committee adopts in their entirety, as a programme for an anti-malaria campaign in Albania, the recommendations contained in Dr. Haigh's report and such as are presented by the Malaria Commission.

"5. The Committee asks the Council of the League of Nations to draw the attention of the Albanian Government to the advisability of taking into consideration the help offered by the League of Red Cross Societies with regard to educational anti-malaria propaganda."

157. **Appointment by the Czechoslovak and Roumanian Governments of a Liaison between their National Health Administrations and the Health Organisation of the League.**

Dr. RAJCHMAN read a letter addressed to the Secretary-General of the League by Dr. Benes, Minister for Foreign Affairs of Czechoslovakia and Member of the Council of the League (Annex 67). Dr. Benes explained in his letter that the Public Health Administration of Czechoslovakia had established a special bureau which was intended to ensure a closer collaboration with the Health Organisation of the League. He also asked that Dr. Tomanek might be authorised by the Health Organisation to ensure this liaison from the side of the Secretariat of the League.

Professor CANTACUZÈNE was happy to inform his colleagues that a similar step had just been taken by Roumania. The new law on the organisation of the Ministry of Public Health contemplated the institution of an office for international relations which was intended to keep in permanent touch with the Health Organisation and with the Office international at Paris. It would be the duty of this office to organise and direct the enquiries suggested by these two organisations and to ensure regular correspondence with them. The law had not yet been voted by Parliament, but the office had already been set up by Ministerial decree and had begun to work. It was housed in his Institute and the control had been entrusted to him. He had secured the collaboration of Professor Cinca, Professor of Hygiene at Jassy University, of Dr. Kaminsky, Assistant Director-General at the Ministry for Public Health, of Dr. Pannitesko, Head of the Epidemiological Department of the Ministry of War, and of Dr. Popp, Head of the Statistical Department at the Ministry for Public Health, who had specialised in this class of question.

The PRESIDENT thought the Committee would be unanimous in expressing its high appreciation of the two communications which had just been made and thought it would wish to adopt a resolution to this effect.

Dr. RAJCHMAN read the letter which he had addressed to Dr. Benes defining the conditions under which, in the view of the Secretary-General, it would be permissible for Dr. Tomanek to fulfil the duties suggested.

On the request of Dr. TSURUMI, *it was decided that the members of the Committee would receive a copy of the correspondence on this subject between Dr. Benes and the Secretariat.*

*The Committee adopted the following resolution:*

"The Health Committee desires to express its appreciation to the Governments of Czechoslovakia and Roumania for the renewed demonstration of interest which they take in the work of the Health Organisation of the League of Nations by establishing bureaux to facilitate co-operation between their Health Administrations and the Health Organisation of the League. This action can only result in making this relationship, which the Health Committee values so highly, stronger and more fruitful."

158. **Revision of the International List of the Causes of Death : Letter from Dr. Haven Emerson, of the University of Colombia.**

The PRESIDENT informed the Committee that he had received from Dr. Haven Emerson, of the Department of Public Health of the University of Colombia, a letter dealing with the revision of the International List of the Causes of Death.

Dr. Emerson informed him that the Committee instructed to study the statistical value of the certified causes of death as established by the American Public Health Association and the revision of the international classification had begun, since the first fortnight of March, to work

on the revised list adopted by the Conference at Paris in 1920. A provisional report was to be submitted to the Public Health Association at its meeting to be held at St. Louis next October.

The Committee had instructed him to ask the President of the Health Committee to assist in obtaining such suggestions as other groups of statisticians and registrars in countries Members of the League had prepared, with a view to a further revision of the International List to be presented for consideration in 1929 under the auspices of the Health Organisation or otherwise. He would communicate later to the President of the Health Committee the provisional conclusions in which the work of the Committee in question had resulted.

The PRESIDENT said that the Committee would wish to thank Dr. Emerson for his communication.

On the suggestion of Sir George BUCHANAN, *it was decided to place on the agenda of the October session the question of the revision of the International List so far as the Committee was concerned.*

*The Committee adopted the following resolution:*

> "The Health Committee, having noted with pleasure the intention of the American Public Health Association to communicate to it their draft conclusions concerning the nomenclature of causes of death, decides to insert in the agenda for its October session the examination of the question of the international nomenclature of the causes of death."

159. **Question of the Injury to Public Health which might arise from the Use in Motor Engines of Petrol containing Lead Compounds: Letter from Dr. Haven Emerson, of the University of Colombia.**

The PRESIDENT said that the letter from Dr. Emerson also mentioned researches which were being made both in Government laboratories and in University laboratories on the injury to public health which might result from the use, which was becoming more and more common, of petrol containing lead compounds for motor engines. Dr. Emerson had learned that Professor Zangger, of the University of Zurich, had made conclusive experiments on the subject. Dr. Emerson asked that the result of researches made in this matter might be communicated to him.

The President proposed that this request should be forwarded to the International Labour Office, which was dealing with the question.

Dr. CAROZZI said that the question had also an importance from the economic point of view. The employment of petrol containing these compounds was prohibited in the States of New Jersey and New York and a movement towards prohibition was beginning in England and Switzerland. He thought there were certain differences of opinion in the United States as to the harm that might arise from the use of these compounds. It was not yet possible for him to publish the documents which he had collected, as he must continue his researches into the process of manufacture.

Dr. CARRIÈRE said that, pending the settlement of the question, he had caused the import of the said petrol into Switzerland to be prohibited.

*The proposal of the President was adopted.*

160. **Final adoption of the Resolutions of the Committee.**

The various resolutions based on the discussions which had taken place during the session were read.

REPORT OF THE OPIUM COMMISSION: RESOLUTION IX.

Sir George BUCHANAN asked that the terms used in the Opium Convention, which had been very carefully weighed, should be reproduced in the text of the resolution.

*The resolution, subject to these alterations, was adopted.*

REPORT OF THE COMMISSION ON INSTRUCTION IN PUBLIC HEALTH: RESOLUTION X.

The second sentence of the fourth paragraph, stating that it had been decided to continue the enquiry with the object of ascertaining the best methods of health instruction with a view to recommending them as calculated to contribute to the improvement of public health, was amended as follows, as the result of an observation by Professor OTTOLENGHI:

> "It is accordingly decided to continue the researches with the purpose of discovering the most appropriate methods of public health instruction that would contribute to improvement in the public health."

Sir George BUCHANAN asked that the beginning of the last paragraph ("The Committee strongly insisted that, in order to carry out its object in the best possible way, it was necessary," etc.) should be modified in the English text to read as follows:

> "The Committee is impressed by the importance of the fact that, to produce the best results, it is necessary," etc.

*The resolution, as amended, was adopted.*

### Questions relating to the Epidemiology of Smallpox: Resolution XII.

Professor Ottolenghi thought that the terms of the resolution as presented to the Committee were too wide. In this resolution the Health Committee entrusted Professor Jorge with the task of studying the question of smallpox in relation to other diseases. He proposed that instead of "other diseases" the resolution should refer to "other infectious diseases with which it seemed to be connected".

Sir George Buchanan proposed that the resolution should request a report on certain questions relating to the epidemiology of smallpox "which have been brought before the Committee during the present session".

*The resolution, thus amended, was adopted.*

### Report of the Cancer Commission: Resolution XV.

Professor Léon Bernard reminded the Committee that it had decided to take account also of the information which might be collected in Switzerland. There was no mention of this in the resolution. A further paragraph (*c*) should be added to this effect.

Dr. Rajchman supported the proposal of Professor Léon Bernard. The Committee had asked Dr. Carrière to undertake a precise task.

Sir George Buchanan proposed to add the following phrase: "The proposed collaboration of certain other countries, notably Switzerland and the United States, in the pursuance of the enquiry".

*This text was adopted.*

Sir George Buchanan thought that the sentence affirming that the Committee was particularly happy to note that certain of the very important questions which had been raised might be regarded as provisionally settled was too positive in character.

Dr. Jitta agreed. So far only a hypothesis had been put forward.

Sir George Buchanan proposed a new text to the paragraph in question.

*The resolution, thus amended, was adopted.*

### Abuses arising from the Use of Patent Medicines: Resolution XVIII.

As a result of observations by Sir George Buchanan, it was laid down in the first paragraph that the Conference on Biological Products would be held at Geneva in September and that the note of Professor Poulsson and the observations of Dr. Knaffl-Lenz would be sent to the Conference.

Sir George Buchanan considered that, in the third paragraph, the sentence to the effect that the Health Committee had decided to include among its work a study of the problem of medicinal charlatanism, *considering the question in its widest aspect,* committed the Committee and its two Rapporteurs in too definite a manner.

Professor Léon Bernard, on the contrary, represented that the words in question declared the intentions of the Committee as shown in the discussions which had taken place.

As a result of further observations by Sir George Buchanan, supported by M. Velghe and by the President, the words "considering the question in its widest aspect" were suppressed.

*The resolution was adopted.*

### Draft Agreement between Belgium and the Netherlands regarding Sanitary Measures in relation to Navigation: Resolution XXII.

Sir George Buchanan observed that the Agreement was only a draft at present and that in these circumstances it would be premature to recommend other maritime countries to follow the example of Belgium and the Netherlands.

Professor Léon Bernard proposed to put the second paragraph last in order to emphasise that the recommendation of the Committee referred not only to the conclusion of such agreements but also to the insertion in these agreements of the clause relating to conciliation.

Sir George Buchanan thought that the order of the paragraphs should be maintained and that the resolution should be amended. It would be better for the Committee to express the view that it would be useful to add a conciliation clause to "agreements of this nature" than to "this agreement".

*The resolution, thus amended, was adopted.*

### Report of the Tuberculosis Commission: Resolution XXIII.

Professor Léon Bernard read the draft resolution, which he had intentionally drafted in very general terms.

*The resolution was adopted,* subject to the reservations already made by Sir George Buchanan and Dr. Chodzko.

*The resolutions of the Committee as a whole were adopted* (Annex 62).

161. **Representation of the Health Committee on the Advisory Committee for the Protection of Children.**

Professor Léon BERNARD said that the Committee had not, properly speaking, adopted any resolution concerning the part to be played by its representative on the Advisory Committee for the Protection of Children. He read a note which he had prepared for transmission to the Secretariat of this Committee (Annex 63).

*The note was approved.*

162. **Date of the Next Session of the Committee.**

The PRESIDENT said that, according to decisions which had been taken, the Health Committee must meet immediately before the Permanent Committee of the Office international. As it was not yet known when the latter would meet, the Health Committee could not for the moment fix the date of its next session.

Dr. LUTRARIO expressed the desire that, for reasons of convenience, the sessions of the two organisations might be separated by an interval of at least two days.

Dr. RAJCHMAN drew attention to the fact that the International Congress on Malaria was to meet at Rome on October 6th. The Health Committee might therefore meet either on September 28th or October 12th.

Professor Léon BERNARD said he was in favour of September 28th.

Professor OTTOLENGHI feared that this date would be too near to that of the Malaria Congress.

Dr. JITTA said that, after the session of the Office international, it was possible that there might be a meeting of the International Health Conference.

The PRESIDENT said that, when the exact date of the next session was fixed, these various factors would be taken into account.

163. **Close of the Session.**

The PRESIDENT said that the work of the Health Section had shown satisfactory progress. Among the results achieved, he would refer particularly to the establishment of the Bureau at Singapore, which would be of the first importance for the health of the world as well as for the later work of the Committee. He would take this opportunity of paying a further tribute to Dr. Norman White.

The technical work of the Committee had not been any less satisfactory, and he was sure that he would be interpreting the feelings of all his colleagues in expressing his gratitude to the Medical Director for the work which he had done with so much devotion, skill and talent, not only as regards the steps which he had taken to carry out the instructions of the Health Committee, but also as regards the work he had done on his own initiative. Even the work done on his own initiative, which had been subjected to certain criticism at the beginning of the session, had met with the approval of the Committee, which hoped that that work would be crowned with success. The Medical Director could be assured of the entire confidence of the Committee. He would also thank the staff of the Medical Director, whose help had been of great value to the Committee and who were inspired with the spirit of the initiative and energy of the Director. He would like to congratulate his colleagues on the work they had done both in the Committee and in the Commissions.

He wished, particularly, to express his gratitude to M. Velghe, who ensured a close and cordial co-operation between the Health Committee and the Permanent Committee of the Office international, which was of such importance for the future of the Health Organisation.

It was possible that certain members of the Committee might not, at the end of this session, feel an entire satisfaction with the discussions which had taken place. Personally, he thought that too much time had been lost in details and in discussions upon points of procedure which ought not to engage the attention of the Committee for too long a time. Perhaps the feeling to which he alluded was due to the faults of the President himself. Account must be taken of the fact that the programme of the sessions was generally very heavy. It seemed difficult, however, materially to increase the length of the sessions, since the majority of the members of the Committee already devoted to its work and to the work of the Office international nearly two months each year. Perhaps it would be advisable to consider whether a better method of work could not be devised which would make it possible more thoroughly to discuss the general lines of the larger questions without becoming lost in the details. He invited his colleagues to consider this point and to present suggestions with a view to establishing a better method of work.

Professor Léon BERNARD said he was sure that he was interpreting the feelings of his colleagues in expressing his gratitude to the President, whose qualities were more highly appreciated at each session of the Committee. Personally, he would regret any change in the manner in which the President presided over the meetings of the Committee, a manner which combined so wide a tolerance with so great an ability. It was not in this direction that one must look for an improvement in the work of the Committee. It was for the various members of the Committee, as the President had said, to think over the question in a suitable spirit and to present suggestions.

The PRESIDENT declared the fourth session of the Health Committee to be at an end.

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**Annex 46.**

C. H. 274.

# AGENDA OF THE FOURTH SESSION OF THE HEALTH COMMITTEE OF THE LEAGUE OF NATIONS

*adopted on April 20 th, 1925.*

1. Report by the Medical Director on the Work of the Health Organisation since October 1924:
   - (*a*) Decisions of the Council of the League regarding the work of the Health Committee;
   - (*b*) Interchange arrangements in 1925 and proposals for 1926;
   - (*c*) The work of the Service of Epidemiological Intelligence and Public Health Statistics, including proposals for new developments;
   - (*d*) The Far Eastern Epidemiological Intelligence Bureau at Singapore;
   - (*e*) Special enquiries and investigations;
   - (*f*) The participation of the Health Organisation in the work of Conferences and Congresses;
   - (*g*) The publications of the Health Organisation;
   - (*h*) Miscellaneous.
2. Estimates for 1926.
3. Report of the Permanent Standards Committee.
4. Report of the Cancer Commission.
5. Report of the Malaria Commission.
6. Request by the Turkish Government for the nomination of an expert adviser on malaria.
7. Progress Report of the Commission on Public Health Instruction.
8. Report of the Commission on the Dutch Proposal.
9. Report of the Far Eastern Commission.
10. Report by Dr. Norman White on the Singapore Conference.
11. Report on the possibilities of an international enquiry on tuberculosis
12. Report by Dr. Gilmour on his enquiry in Persia.
13. Resolutions of the Emigration Conference held at Rome, May 1924
14. Miscellaneous.

ANNEX 47.

# REPORT OF THE MEDICAL DIRECTOR ON THE WORK ACCOMPLISHED BY THE HEALTH ORGANISATION SINCE THE THIRD SESSION OF THE COMMITTEE

*Approved by the Committee on April 25th, 1925.*

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## I.

## THE DECISIONS OF THE COUNCIL OF THE LEAGUE OF NATIONS IN REGARD TO THE WORK OF THE HEALTH COMMITTEE AND ACTION ARISING THEREFROM.

1. I have the honour to remind the Committee of the approval given to the work of its October session by the Council of the League of Nations at its December session. The report adopted by the Council was distributed on December 24th, 1924, together with extracts of the Council Minutes. I beg to point out in particular three decisions of the Council:

(*a*) The Council was glad to note the intention to bring immediately to the notice of the Permanent Committee of the Office international the resolutions taken by the Health Committee at each of its sessions, and the understanding by which the Health Committee will hold its sessions before those of the Office international. The Council requested the Secretary-General to insert in the Council's annual report to the Assembly the reply given by the Health Committee to the Council's request for observations. The Council agreed, after discussion, that the question of the presentation to the Office international at Paris of the annual report of the Health Committee was one of internal procedure for the Health Committee, and that therefore it might be raised by any member of the Committee under the Committee's Rules of Procedure.

(*b*) The Council endorsed the technical recommendations made by the Committee with regard to an expedition into Equatorial Africa for the purpose of an enquiry into the fundamental problems of epidemiology of sleeping-sickness. But, as regards the administrative measures which are necessary to put its recommendation into effect, the Council decided that the Governments of the countries concerned must be consulted, and that the Secretary-General be requested to ask the countries concerned whether they would agree to the convening at an early date of a conference of representatives of Ministries of Colonies to discuss the financial and administrative possibilities of despatching the special mission recommended by the Health Committee. The Council also suggested that, if such a conference take place, it might perhaps also discuss the proposals made by the Committee as to the desirability for the Governments of the affected countries in Africa to establish a definite liaison between administrators and medical officers on both sides of the frontiers of the various States in order to ascertain the affected zones, the prevalence of the tsetse fly, the migration of the population and other factors favourable to the disease.

(*c*) The Council endorsed the Committee's opinion that the Health Organisation should be represented on the Advisory Committee for questions relating to the Protection of Children, and decided to ask the Health Committee to nominate one of its members to act as an assessor to the Advisory Committee.

(*d*) In expressing its approval of the action taken for the establishment of the Singapore Bureau, the Council referred to the International Sanitary Conference convened by the French Government for October next. In the Council's opinion the chief value of the Far-Eastern Bureau of the Health Section will be in its assistance in the control of the principal epidemic diseases. This control, from an international point of view, is regulated by a series of international sanitary conventions, the chief of which, namely, the Paris Convention of 1912, has been revised by the Office international with the assistance, for certain sections of the draft, of the Health Committee. The Council believes that the task of the October Conference will manifestly be a very delicate one, and it is obviously for the Conference itself to settle the limits of its work. The Council can only express the hope that it may result in a general co-ordination of the various international obligations in public health matters. In its opinion the agreements which have been concluded with the assistance of the Technical Organisations of the League and the studies they have undertaken in this matter will have a considerable place in this work of co-ordination. It was for this reason that the Council offered to the French Government, by decisions reached on two previous occasions, the assistance of the Technical Organisations and of the

Health Section of the Secretariat. It is, of course, understood by the Council that this assistance refers not only to the discussions in the Conference itself, but also to any preparatory work which might be considered necessary.

2 *a*. The first decision calls for no comment on my part.

*b*. In pursuance of the second decision, the Secretary-General of the League enquired of the Governments of Great Britain, Belgium, France, Italy, Spain and Portugal whether they accepted the Council's suggestion of a Governmental Conference to consider the administrative aspects of the Sleeping-Sickness Expedition. All the Governments consulted have accepted the invitation. In accordance with the suggestion of the British Government, the Conference will be held at an early date in London. The British Government attaches great importance to the investigation of the problems of sleeping-sickness and is most anxious that every effort should be made to combat this disease in the most effective manner possible. The British delegation to the Conference will include the Hon. W. G. Ormsby-Gore, M.P., Parliamentary Under-Secretary of State for the Colonies. France will be represented by Professors Mesnil, Brumpt and Gustave Martin: Belgium by Professor E. Van Campenhout. We have not yet received the names of the other delegations. Dr. Andrew Balfour, Chairman of the Expert Committee on Sleeping-Sickness, intends to convene his colleagues in London at the same time. Professor Brumpt was co-opted as a member of the Committee with the approval of your President. The Health Committee will have in its hands a second report of its experts on sleeping-sickness, drafted by Dr. Bagshawe and approved by all his colleagues.

*c*. The first session of the Advisory Committee for the Protection of Children was due to meet on February 17th, and it was thus necessary, in order to give effect to the third decision of the Council, to consult the Committee by correspondence. The President has suggested, and the Committee has accepted as its representative, Professor Léon Bernard, who will gladly consult all his colleagues before the meetings, and particularly those who have a special interest in child welfare. The first session of the Advisory Committee was, however, postponed at the last moment at the request of several Governments and will not take place until May 20th.

*d*. The necessity for a general co-ordination of the various international obligations in public health matters, which the Council hoped may result from the work of the October International Sanitary Conference, was well illustrated by the very important decisions reached by the Pan-American Sanitary Conference held in Havana in November 1924. I had the honour to distribute to the Committee on January 7th last a copy of the Pan-American Sanitary Convention adopted *ad referendum* at that Conference. Dr. Norman White, at the invitation of the President of the Conference, represented the Secretariat, and will be at the disposal of the Committee for any detailed information which it may desire.

A further illustration of the necessity for co-ordination of international health agreements is given by the negotiations undertaken at the suggestion of the Committee by the Belgian and Dutch Public Health Services, which have resulted in the preparation of a draft sanitary agreement which I had the honour to distribute on March 25th and which the Committee may wish to discuss during the session.

We understand that the French Government issued invitations to the Conference, and two Governments have communicated copies of their replies to the Secretary-General, in which they suggest the desirability of the appointment of a small preparatory committee representing the Paris Office and the Geneva Health Organisation for the purpose of collecting for submission to the October Conference all the various conventions, agreements and studies negotiated or undertaken, in addition to the draft modifications of the 1912 Convention adopted by the Permanent Committee of the Office international.

3. At its March session, the Council decided to invite the Committee to consider immediately whether it would be expedient to consult the Office international so that a first decision and a first recommendation can be made as to what drugs should be excluded from or brought under the new International Opium Convention of 1925. I had the honour to distribute to the members of the Committee, on March 20th, the text of the Council's resolution, and the Opium Convention, together with the Protocol and the Final Act.

At the suggestion of your President, the Chairman of the Opium Commission decided to convene his colleagues on the first or second day of the present session in order to present a report to you arising out of the Council's invitation. Professor Erik Knaffl-Lenz was invited to prepare a draft memorandum, which he will present personally to the Commission and to the Committee.

4. At the March session of the Council the Spanish member, H.E. Señor Quiñones de León, stated that, his Government being aware that the question of malaria was at present the subject of investigations organised by the Health Committee, he had been instructed to inform the Council that, during the forthcoming visit to Spain, his Government would he happy to extend to the Malaria Commission a most cordial welcome. The Council accepted this generous offer with gratitude.

The Committee will be glad to learn that the Spanish Government offers accommodation to the members of the Commission during their 25-days' stay in Spain as well as all railway facilities by day and night.

II.

## ACTION ARISING OUT OF THE DECISIONS OF THE HEALTH COMMITTEE.

### I. THE STUDY OF THE POSSIBILITIES OF AN INTERNATIONAL ENQUIRY INTO TUBERCULOSIS

The Committee will remember that it decided to limit the enquiry on tuberculosis to:

(*a*) The biological study of tuberculins: the composition, methods of preparation and varying degrees of activity, the carrying-out of the enquiry having been referred to the Permanent Standards Committee;

(*b*) The comparative study of the value of the various social measures for combating tuberculosis, and in particular the question as to the decline in tuberculosis mortality in a large number of countries.

1. The first question, by a decision of your President, was entrusted to a special Sub-Committee of the Permanent Standards Committee under the Chairmanship of Professor Calmette, with the co-operation of Dr. Tsurumi and Professor Léon Bernard. A very detailed questionnaire prepared by the Sub-Committee, copy of which will be found in Appendix 1, was sent to a considerable number of the tuberculin-producing institutes in:

| | | |
|---|---|---|
| Argentine | Denmark | Netherlands |
| Australia | France | Poland |
| Austria | Germany | Russia |
| Belgium | Great Britain | Switzerland |
| Canada | Italy | Uruguay |
| Czechoslovakia | Japan | |

Very detailed replies have been received from:

| | | |
|---|---|---|
| Czechoslovakia . . . . | Dr. F. Weleminsky . . . . . | Prague. |
| | Therapeutic Institute (Dr. Macek) . . . | Iwanovice. |
| France. . . . . | Laboratoires Mérieux. . . . . | Lyons. |
| Germany . . . . . | Behringwerke . . . . . | Marburg. |
| | Meister, Lucius & Brüning. . . . . | Höchst. |
| | E. Merck . . . . . | Darmstadt. |
| Great Britain. . . . . | Wellcome Physiological Laboratories . . | London. |
| | Evans, Sons, Lescher & Webb . . . . . | London. |
| | Laboratory of the Royal College of Physicians. . . . . | Edinburgh. |
| | Duncan, Flockhart & Co. . . . . | London. |
| Italy. . . . . | Laboratorio Bruschettini . . . . . | Genoa. |
| Japan . . . . . | Government Institute for Infectious Diseases . . . . . | Tokio. |
| | Kitasato Institute for Infectious Diseases | Tokio. |
| Netherlands. . . . . | Rijksseruminrichting . . . . . | Rotterdam. |
| | Université vétérinaire. . . . . | Utrecht. |
| | Dr. Weenbas, Directeur de l'Institut vétérinaire. . . . . | Leeuwarden |

On the basis of the replies received and of the results of very important researches recently carried out on behalf of the British Medical Research Council, a programme of comparative laboratory investigation will be drawn up, and it is hoped that the first definite results will be submitted at the October session of the Health Committee.

2. The Committee will remember that the Secretariat was asked to collect information bearing on the second question with a view to the submission of a first report to your April session. I was very glad to obtain the assistance of Dr. Biraud, of the Paris Faculty of Medicine, who has studied the statistical methods of enquiry in the United States and who, as the Committee will judge by his report, is a very competent investigator. His report (see Annex 50) details the work undertaken in the Section and by himself with the ever-ready guidance of Professor Léon Bernard and with the benefit of a detailed consultation with Sir George Buchanan and his collaborators at the British Ministry of Health.

His report will, I think, give additional evidence for the belief in the general decline in tuberculosis mortality. It gives cogent reasons in favour of an international enquiry into tuberculosis if it be limited to specific and well-defined subjects, the study of which will certainly gain by comparative investigations. It suggests, as a basis for your discussion, the possibility of comparing the general movement of mortality with that due to tuberculosis, the influence of nutrition on the incidence of and mortality from tuberculosis, the influence of milk control on children's mortality from tuberculosis, and a comparative investigation of the cost of anti-tuberculosis measures based on a similar programme in selected countries of Europe and America.

I wish to express our real indebtedness to Dr. Biraud for his collaboration and to Professor Léon Bernard and Sir George Buchanan and his collaborators for all the help they have given in the preparation of Dr. Biraud's report.

## II. INVESTIGATION OF THE EXISTING REGULATIONS FOR THE STATE CONTROL OF BIOLOGICAL PRODUCTS AND IN PARTICULAR OF INSULIN.

The Committee will remember that it asked me to prepare a memorandum on this subject. To obtain sufficient documentation I have applied to the Chiefs of Public Health Services of the various countries of Europe, America and the Far East to give it the requested information. In addition, I have obtained through the agency of an unofficial organisation a series of texts and other data, part of which I have submitted to the Health Services for their comments. So far replies have been received from 22 countries and comprise 13 official and 18 private documents. As regards the sale of insulin, special regulations are in force in the Argentine, Australia, Canada and Norway. As regards patents covering the manufacture of insulin, these have been obtained so far in the United States of America, Canada, Japan and Spain. In eight other countries the word "insulin" has been registered as a trade mark.

The Committee will also remember the decision regarding the representation of the Health Organisation at the International Conference for the Unification of Potent Drugs. The Secretariat was to prepare a memorandum on the special work of the Health Committee to be submitted to the proposed Conference. This Conference, I understand, will meet in September next, and thus there will be an opportunity for presenting the special memorandum to the Permanent Standards Committee before the Conference. Correspondence has been exchanged with Professor Poulsson, of Oslo University, regarding a preliminary report into the possibility of unifying certain pharmaceutical methods. This report will be available for presentation to the Permanent Standards Committee and, together with the opinion of that Committee, to the October session of the Health Committee.

## III. INVESTIGATION INTO THE QUESTION OF DISINFECTION.

The Committee invited the Medical Director to take the necessary steps to collect, as soon as possible, data regarding the present state of the application of disinfection and the texts of the Disinfection Regulations in force in the different countries, such data to be used as the basis for a general report to be submitted to the Health Committee. It was understood that the requests would be addressed to the Central Health Administrations, which would, if necessary, collect information from the municipalities.

I have applied to the Chiefs of Health Services in various European countries enquiring whether they would be good enough to prepare the report themselves or else to indicate competent experts to whom the enquiry in regard to their countries might be entrusted. The Committee will be glad to learn that Drs. Carrière, Jitta and Lutrario have very kindly offered to prepare the reports for their respective countries. The following experts designated by their central administrations are at present preparing the reports for the Committee:

Austria: Dr. KAISER, of the Ministry of Public Health.
Belgium: Dr. RULOT, of the Health Administration, Ministry of the Interior and Health.
Czechoslovakia: Drs. KULHAVY, HRDLIČKA and VRANY, of the Ministry of Public Health.
France: Dr. THIERRY, Inspector-General of the Health Service of the City of Paris.
Germany: Professor SELIGMANN, of the Health Service of the City of Berlin.
Poland: Mrs. S. ADAMOWICZ, of the State Institute of Hygiene.
Scandinavia: Dr. C. NAELSUND, Professor at the University of Upsala.
Kingdom of the Serbs, Croats and Slovenes: Dr. S. IVANIĆ, of the Ministry of Public Health.

We have, so far, received only one collective report, namely, by Dr. Jitta. You have no doubt read this document (C.H. 282) with the greatest interest and you will certainly wish to express to your colleague your real gratitude for this remarkable statement.

I hope to be able to present the general memorandum to the October session of the Committee.

## IV. THE RESULT OF INTERCHANGES IN 1925 AND PROPOSALS FOR 1926.

1. The first collective interchange began in London on February 9th and closed at Geneva with a final conference from March 25th to 27th. Fifteen medical officers, commissioned by their Public Health Services, participated. The arrangements, which were as usual in the hands of the special committee of the Society of British Medical Officers of Health, proved admirable and were praised by all the participants at the final conference. Mr. Neville Chamberlain, the British Minister of Health, was good enough to welcome the group at his Ministry, and Sir George Newman very kindly gave an introductory address. As on previous occasions, the

participants divided into groups of four and were allotted to the study of local conditions in the following four districts:

1. Leeds and West Riding (Yorkshire).
2. Wolverhampton and Staffordshire.
3. Willesden and Middlesex.
4. London.

The foreign officers have felt that their studies would greatly benefit by the addition to each group of a British Medical Officer, who would follow the whole course of local study. In certain Continental countries the groups are usually accompanied by a native colleague, and it might be desirable to introduce the same practice for the British interchange.

The Committee will no doubt desire to express its great appreciation of the reception given by the British Government, of the work of the British organising committee and of the assistance given by Sir George Buchanan and his colleagues of the Society of British Medical Officers of Health and the local authorities of the districts visited.

2. The interchange organised in conjunction with the International Labour Office, and to which Medical Inspectors of Labour were invited, began at Geneva on March 23rd. Medical officers from the following countries participated:

1. Belgium
2. Czechoslovakia
3. Great Britain
4. Japan
5. Netherlands
6. Poland
7. Russia
8. United States
9. Kingdom of the Serbs, Croats and Slovenes.

During the first week, the group had an opportunity of studying the organisation and the methods of work of the International Labour Office and the League of Nations. They were also addressed by French and Swiss experts on Industrial Hygiene, and finally joined with the British group during the last two days in the discussions on the work of the League Health Organisation.

On March 29th they left for an eighteen-day study of the Official Organisation of Medical Inspection of Labour in Belgium, accompanied by visits to the various factories representative of the chief industries of Belgium. Three days, from April 18th to 20th, will be spent in the investigations of the Lille district in France. Great Britain will be visited from April 22nd to 30th, and the Netherlands from May 1st to 4th. The group will meet in a conference for a final exchange of views at The Hague. The group, throughout the tour, is in charge of Dr. Dhers, of the Health Service of the International Labour Office.

3. The collective study in Belgium will begin on May 4th and will continue until June 19th, with a final conference at Geneva from June 21st to 24th. Officers from the Health Services of the following countries will attend this conference:

1. Austria
2. Danzig
3. Denmark
4. France
5. Germany
6. Great Britain
7. Irish Free State
8. Italy
9. Poland
10. Portugal
11. Russia
12. Spain
13. Switzerland
14. Kingdom of the Serbs, Croats and Slovenes

M. Velghe has had a special handbook prepared on the sanitary organisation of Belgium, representing a volume of some 300 pages. He has also had all the sanitary laws and regulations of his country collected in a volume of about 600 pages. We shall, I hope, distribute those two volumes to all the participants before they start for Brussels. The Committee will no doubt desire to express to M. Velghe its deep gratitude for the initiative which he has taken in the preparation of these very valuable volumes, which will prove of the greatest utility not only to the interchange officers but to all the sanitarians throughout the world.

4. I hope to be able to give the Committee during its session supplementary information about the collective interchange which may take place in the Kingdom of the Serbs, Croats and Slovenes in June next. The Government of the Kingdom of the Serbs, Croats and Slovenes has generously offered complete hospitality to all the members during the whole of their stay in the country. Definite acceptance of the candidates will be notified as soon as arrangements in Belgrade are completed. Dr. Stampar has already transmitted to us a detailed report of the organisation and the work of his service, which will prove of real value to the participants in the interchange.

5. The Committee will be very glad to learn that the Japanese Government has very generously offered free transportation on all the Japanese railways during the collective interchange which will begin in Tokio at the end of October. This visit, to which Medical Officers of the Far Eastern administrations have been invited, will probably group together some 20 participants who, after spending four to five weeks in Japan, will study for a fortnight the admirable institutions and organisations of preventive medicine established in Manchuria. The Manchurian railways have also very kindly offered free passes for the whole group.

The Japanese Public Health Service has edited a special volume, which I hope to be able to send to members of the Committee by the end of May. It will be distributed to all participants in ample time.

The following countries have been invited to participate:

1. Australia
2. Ceylon
3. China
4. Dutch East Indies
5. Federated Malay States
6. Hong-Kong
7. India and Burmah
8. Indo-China
9. New Zealand
10. Philippines
11. Russia (Vladivostock)
12. Shanghai
13. Siam
14. Straits Settlements

The Committee will remember that this interchange will follow the meeting of the Far Eastern Association of Tropical Medicine. It will thus, in addition to giving an insight into the Japanese Medical and Public Health Service, afford manifold opportunities for establishing real collaboration and inter-service co-operation in the Far East. It will strengthen further the work begun by the Singapore Conference and continued by our Far-Eastern Bureau of Epidemiological Intelligence.

6. The Latin-American group met at Havana on March 4th, the health services of the following countries being represented: Argentine, Brazil, Colombia, Cuba, Mexico, Paraguay, Peru, Uruguay, and Venezuela, while the Under-Secretary for Health of Costa Rica will join the group in London at the beginning of June, having already visited the United States and Canada. The group is in charge of Dr. Louis Destouches, of the Health Section.

The group received a most cordial and generous welcome on the part of the President and the Government of the Republic of Cuba. A special Presidential decree provided for all the facilities which were given, and the visit was so successful that the Director-General of the Health Service submits to you proposals for a more permanent organisation of interchanges in Latin-America, based on Cuba.

The group is at present studying the Health Services in the Southern States of the United States of America. The programme, prepared very kindly by Surgeon-General H. S. Cumming and his collaborators, provides for the study of every detail of the health practice of the selected southern, northern and central States. The party, after spending ten weeks in the United States, will study, for over a fortnight, the industrial and rural districts in Canada and will proceed to London for a three weeks' study of British health practice. They will then visit the Netherlands, Belgium, France, Switzerland and Italy for the study in those countries respectively of the problems in which the administrations are particularly interested. Thus, in the Netherlands, principally housing and statistics; in Belgium, dispensaries of social hygiene; in France, tuberculosis and child-welfare organisations; in Switzerland, tuberculosis institutions and the central statistical office; and, in Italy, anti-malarial measures. A final conference at Geneva will enable the group to have a full exchange of views on their laborious and complete studies.

7. I am glad to say that it was possible this year to set aside a credit for "individual interchanges".

It is the Committee's policy to extend the benefits of the interchange system to the various continents, and a full demonstration was given this year by the organisation of collective studies in Europe, Cuba, the United States, Canada and Japan. But the calls on your organisation are not exhausted by these countries. It has so far been difficult for the health services of the far-distant British Dominions to participate in the collective visits, and individual missions seemed to be more suitable in their cases. The Committee will be glad to learn that, under the arrangements made, the Director-General of the New Zealand Public Health Service and the Deputy Director of the Australian Federal Health Administration are coming for an extensive study in Europe. The Canadian participant in the British collective interchange was also able to prolong his stay for the study of the anti-tuberculosis measures in certain European countries.

We are glad to be in a position to offer an individual fellowship to a Swiss medical officer in charge of a Cantonal Health Insurance Organisation, who will study and report on the new developments in health insurance, particularly from the point of view of public health and preventive medicine in the various European States.

Two Serb-Croat-Slovene medical officers specialising in malaria control will also be able to undertake special studies at various institutions and in specific countries.

Two, or possibly three, medical specialists in child welfare will be afforded facilities for the study of their particular problems in three or four countries.

The Committee will consider at this session the report and recommendations presented by Drs. Haigh and Gilmour as a result of their surveys of Albania and Persia, undertaken at the request of the two Governments. Each report proposes that a selected medical officer from the country visited should be given an opportunity to become thoroughly acquainted with the European methods of public health and the special problems interesting his country. It will certainly be possible to organise these two studies.

8. This full programme could be put into operation this year, thanks to the unfailing interest shown by the International Health Board of the Rockefeller Foundation in this side of our activities. A grant of $100,000 was placed at our disposal for the year 1925, while I have every reason to believe that next year a sum of $75,000 will be available.

As you have noted, the number of participants this year was smaller than in previous years, and this may allow us to dispose of a reserve fund for the organisation, during this summer, of a

limited interchange of port medical officers in accordance with the suggestion of Professor Nocht made at the October session.

9. In accordance with previous practice, you will desire to adopt at this session a programme for 1926.

You will no doubt wish to have another collective interchange in Great Britain. I have reason to believe that our German colleagues will welcome a collective interchange in Germany, for which they are already making preparations. The Danish Health Service would also gladly receive a new group of visitors next year. I suggest that collective interchanges, limited to fifteen participants each, should be organised in these three countries.

The Committee will wish to continue the collaboration established this year on a large scale with the Latin-American countries, and I would suggest that a group of six colleagues from the Republics of Central and Southern America be selected for participation in the three European collective interchanges.

General study tours have not so far been held in Africa. The Committee will remember that the Congress of Tropical Medicine held two years ago at Loanda advocated the establishment of a system of periodic collaboration and consultation of the medical officers of the several colonial services. I would suggest that a collective study tour be organised for some twenty officers belonging to the Colonial Services of Spain, Portugal, Belgium, France, Great Britain and the Union of South Africa. A preliminary plan has been drafted, and it might be elaborated in collaboration with your expert Committee on Sleeping-Sickness in Equatorial Africa and discussed informally at the forthcoming Governmental Conference to consider the despatch of an expedition to certain African areas.

As regards specialist interchanges, I would remind the Committee of the decision to hold one for specialists in child welfare and another for Port Medical Officers, both, however, of which had to be postponed until next year. The Port Medical Officers' Conference suggested by me as a possibility for this year might be more limited to countries in the northern and western seas. In 1926, the Port Officers of the Mediterranean and Black Sea might very profitably study port quarantine measures and the system of rapid notification of dangerous epidemic diseases.

It will be still possible to dispose of a sufficient credit for several individual fellowships.

Your Budget Commission will have before it the detailed estimates of this programme.

## III.

## EPIDEMIOLOGICAL INTELLIGENCE AND PUBLIC HEALTH STATISTICS.

1. The Committee are fully conversant with the activities of the Service, which were limited to the regular routine of publishing the *Monthly Epidemiological Reports*, to the preparation of tables showing the returns of notifiable diseases for the year 1924 from all the countries included in the *Monthly Bulletin*, and to the further progress of the work of the four groups of experts on fundamental problems of vital statistics appointed in virtue of your decision of last year. The elaboration of statistical material for the preliminary report on tuberculosis involved additional responsibility for the Service, working during the last few months with depleted staff, which had to deal also with several problems arising out of the preparation for and the actual work of your several Commissions.

2. Dr. Norman White will, from April 1925, direct the work of the Service, for which we were fortunate enough to secure the collaboration of Dr. F. G. Boudreau, Chief of the Division of Communicable Diseases, Ohio Department of Health.

3. I am glad to submit for your consideration definite proposals from the Statistical Group on the definition of still-births (Appendix 2). You will also have submitted to you from two members of the Group investigating the problem of joint causes of death, a report (Appendix 3) which, with certain slight reservations, may no doubt be regarded as a statement of the Group's proposals. You will no doubt desire to discuss the procedure to be followed in securing the general acceptance of the recommendations of your Group if and when endorsed by your resolution. We were very fortunate in securing the valuable assistance of the distinguished experts who, after careful study, have placed before you suggestions upon which they have agreed. By suggesting fundamental definitions and by drafting the death certificate into a form capable of becoming a basis for real statistical analysis, your experts have brought you much nearer to your objective, namely, the removal of obstacles to the rendering of epidemiological and public health statistics internationally comparable. This object, towards which you desired to direct the permanent and methodical activities of the Service, cannot be achieved without the fullest co-operation of those immediately concerned in the compilation of the national vital statistics and those responsible for the centralisation of returns of notifiable diseases. It would be of real assistance if means were found to ensure to us a regular, continuous and organised collaboration of those

statistical and epidemiological officers. Agreed proposals, brought forward by eminent experts specialised in the problems entrusted to their analysis, when accepted through a procedure of such organised and regular collaboration, would no doubt meet with but little opposition from the Governments to whom you, as the Advisory Committee of the Council of the League, would make the final recommendations.

4. A notable advance in bringing about collaboration between the statistical officers is represented by the Interchange of Statisticians, of which the second was held at Geneva immediately after your last October session. It was limited to the analysis of the notification of infectious diseases, and from the detailed account in the Progress Report (Appendix 4) you will, I hope, be convinced of the real utility of this system. You will be glad to learn that the International Health Board of the Rockefeller Foundation has generously agreed to continue its grant given for the co-operation in the domain of vital and public health statistics for the same period for which the initial grant for the Service was given, *i.e.*, until the end of 1927.

This year's interchange might be utilised for continuing the work of the group on joint causes of death and for concentrating on the study of this subject, mainly in the technical offices of the northern European countries and with the participation of the Scandinavian, Dutch, Belgian, English, Scotch, French and Swiss officers.

5. The collaboration of Dr. Major Greenwood, with the assistance of Major Edge, in the preparation of handbooks on vital statistics of certain European countries has been, as previously, very valuable. In addition to the two already published, volumes on England and Wales and on Spain are in the press. I understand that two more handbooks may be expected in the course of this year. It might well be considered whether this important part of the general work could not be activated, and whether the publication of a volume containing the relevant information and a reasoned analysis of the systems of a group of countries might not be usefully contemplated.

6. The special studies of Professor Seligmann on meningitis, of Professor Rosenfeld on tuberculosis mortality, of Professor Roesle on the epidemiology of scarlet fever, and of Dr. Tomilin giving a critical analysis of the value of demographic and epidemiological data for the Ukraine, all represent studies aiming at the ultimate end of international comparability.

We have also been able to prepare for publication a further series of reports on the organisation and the working of the public health services in the various countries elaborated either by the Chiefs of the Services or by officers appointed by them for the purpose. Thus we have already published, in addition to the collective volume on the Health Organisation of Denmark, the following reports:

(1) On Czechoslovakia by Dr. Pelc;
(2) On Hungary by Dr. Dobrovits;

while we have in the press:

(3) Report on Latvia by Dr. Cazeneuve;

and in preparation:

(4) Report on Bulgaria, by Dr. Ivan Golosmanoff;
(5) Report on the Kingdom of the Serbs, Croats and Slovenes, by Dr. Stampar;
(6) Report on Finland by the Central Health Administration of the country.

We also hope to secure this year a similar report on Russia.

I have also referred in the chapter on interchange to the volume published by M. Velghe on the sanitary service of his country and by the Japanese Central Administration on their medical and health practice.

I would also remind the Committee of a series of most valuable pamphlets published, at first, under your auspices by the Medical Society in London and reprinted and extended by the British Ministry of Health.

Finally, in accordance with your decision, and having obtained Surgeon-General Cumming's approval of the manuscript, we shall publish a monograph "On the protection of public health in the United States of America" prepared by Professor Piccininni, the Italian participant in the American Interchange of 1923.

7. While all the above work has already resulted in placing before the Public Health Services valuable documentation on the history, legislation, constitution and regular activities of the Health Administrations of the several countries, you have not so far been able to supply a periodical general survey of the progress accomplished in the domain of public health by the various countries. It was your intention to issue such a review, which is included in the ten chief subjects for the work of the Service under the agreement with the Rockefeller Foundation. It states that "the work undertaken by the Service in pursuance of Article 3 will include: . . . (*h*) a review of public health of the principal countries of the world with a view to the issue, if circumstances permit, of reports on the subject as a whole".

Such a volume on progress in public health could only be based on information derived from the Central Health Administrations. It might either be compiled by our staff here or prepared by the competent health services. During the last two years we have examined closely the possibility of compiling this review and we have even prepared a draft document; but we came to the conclusion that it would not be practicable to obtain documentary evidence for the statements based on intelligence derived from periodical publications, and I decided to ascertain how far you could rely on the collaboration of the Central Administrations themselves. With this object in view, I addressed a letter to all the members of the Health Committee on January 14th, 1925, and to the Chiefs of the Public Health Services. The replies were very gratifying. You will be glad to know that Dr. Lutrario, Dr. Carrière and Professor Cantacuzène have very kindly offered to prepare the report themselves for their respective countries. For France, Professor Léon Bernard has obtained, in consultation with the Ministry of Health, the collaboration of Dr. Guilbaut. For Denmark, your President would entrust the report to Dr. Max Christiansen; Professor Pittaluga, after consultation with Dr. Murillo, the Director-General of the Health Service, has secured the collaboration of Drs. Ortiz de Landazuri and Luengo for this purpose. Surgeon-General Cumming has kindly arranged with Drs. Jason, Waterman and Brock C. Hampton to prepare the report for the United States. For the Netherlands, Dr. Jitta has asked Dr. J. A. Putto, Physician attached to the Health Council, to be good enough to prepare the report. Dr. Chodzko has kindly arranged, through Dr. Wroczynski, Director-General of Public Health, for a draft report by Mme Adamowicz. The Chiefs of the Public Health Services of the countries mentioned below would entrust to the gentlemen named the respective chapters of the volume :

| | |
|---|---|
| Austria, | Dr. O. Danzer. |
| Bulgaria, | Dr. I. Golosmanoff. |
| Czechoslovakia, | Dr. J. Hrdlička. |
| Esthonia, | Dr. C. Schlossmann. |
| Greece, | Dr. P. Copanaris (Director-General). |
| Latvia, | Dr. E. Fehrmann. |
| Norway, | Dr. H. M. Gram (Director-General of Public Health) would himself draft the report. |
| Russia, | Drs. A. Syssin and I. P. Kalina. |
| Sweden, | Dr. F. Bissmark. |
| Kingdom of the Serbs Croats and Slovenes, | Dr. I. Kuhn. |

As regards the Dutch East Indies, the Director-General himself, Dr. J. J. Lonkhuyzen, will prepare it, and for the French Colonies Dr. Abattucci, the Deputy-Director-General of the Medical Service at the Ministry for the Colonies.

You will no doubt wish to discuss the details of this proposed publication, and I hope to submit to you, as a roneoed document, one or two specimen chapters.

8. The comparative study of public health statistics and the study of the simplest and most reliable methods of obtaining information regarding the incidence of diseases and the progress of epidemics does not exhaust the programme of the work of the Service adopted by you. You have insisted, both in the discussions of the Provisional and the Permanent Health Committee, on the necessity of organising a rapid interchange of information in regard to particular diseases in cases in which immediate action appears to be necessary.

Plague and cholera seem to be clearly "particular diseases" requiring a rapid service of information. During the first session of the Committee, you decided that, as an experiment, a telegraphic information service might be established between certain carefully selected countries. Acting on this advice, I have enquired of the Sanitary Administrations of countries bordering on the Mediterranean and the Black Sea whether they would be prepared to telegraph to us the appearance of the first cases of plague and cholera at their ports, with subsequent telegraphic or postal information on further developments. After compiling and centralising this information, we would issue it through one or two powerful radio-telegraphic stations. I made clear in my correspondence that the telegraphic information should not be considered as a notification within the meaning of the Paris Sanitary Convention. It would simply constitute a telegraphic transmission of one part of the official epidemic return which is sent regularly to us by post by all the administrations concerned. Those returns are reproduced in full in our *Epidemiological Reports* and published monthly. The new system would simply consist in obtaining a telegraphic extract from the return and in transmitting it by wireless to all Health Administrations.

The French central telegraphic administration is prepared to issue this bulletin from its most powerful station of St. Assize immediately following the official communiqué which is picked up by all the Governmental stations throughout the world. This radio-telegraphic message could only be received by official stations and the Sanitary Administrations would have to arrange with their Governments to have the message transmitted to them. Both for economic reasons and to ensure proper use, the messages would be transmitted in a special code, which I hope to be able to circularise shortly.

I am still in correspondence with several directors and I am only able to report to you the definite adherence of Bulgaria, Palestine and Syria, all anxious to participate and all ready to send telegrams to Geneva at their own expense.

9. The Committee will be particularly glad to learn that we shall shortly receive the first wireless bulletin from our branch office at Singapore.

The Committee will, no doubt, desire to express its real indebtedness to the French Administration of Indo-China, which has offered to transmit gratuitously the weekly messages of our Eastern Bureau from its wireless station at Saigon, the most powerful in the Far East and reaching the more efficient European receiving stations.

This accomplishment is one of the notable results of the Singapore Conference, of which the Committee will have a full report from Dr. Norman White. I had the honour to transmit to you the results of this Conference, which show a most gratifying spirit and readiness for collaboration on the part of our colleagues in the Far East. Dr. Norman White was able, in collaboration with Dr. F. F. Brooke, to whom we have entrusted the direction of our Singapore Branch, to obtain from the delegates at the Conference their detailed observations and advice on all phases of the work of the Bureau. You have, no doubt, noted that the code for telegraphic messages is being prepared by Dr. Brooke, and will, I hope, prove useful not only in the Far East but also for Europe and other parts of the world. Your Far Eastern Commission will wish, no doubt, to discuss all the bearings of the arrangements made, but I should like to draw your particular attention to the evidence on the part of certain Far Eastern Administrations of their willingness to give financial support to the Bureau after the first year of its existence. We hope to be able to associate with Dr. F. Brooke very shortly a colleague belonging to the Public Health Service of another country and also to give facilities for collaboration on the principle of rotation to medical officers from the several participating countries. In order to ensure uniformity of working methods, we have commissioned to the Eastern Bureau one of the statisticians from the Geneva headquarters.

## IV.

## WORK ARISING OUT OF ACTIVITIES OF THE SEVERAL COMMISSIONS OF THE HEALTH COMMITTEE.

Of your ten special commissions, five were engaged in active continuation of their investigations since the October session.

1. *The Standardisation of Sera and Biological Products.*

(*a*) The State Serum Institute of Denmark, acting as your central laboratory for the purpose of this research, has continued to titrate the standards of diphtheria anti-toxin sent to it for testing by the national institutes and laboratories.

(*b*) Comparative investigations as to the test value of the anti-tetanus standards have been continued, with satisfactory results, although as yet not fully conclusive. The final issue of these experiments is expected shortly.

(*c*) The resolutions adopted by the Dysentery Conference in September last had to be slightly amended and a new draft has been drawn up for certain of those resolutions. The new draft will, it is hoped, receive very shortly the approval of all the members of the Conference.

The Copenhagen Institute, to which the preparation of the anti-toxic unit was entrusted, disposes at the present time of a considerable quantity of dry anti-dysenteric serum, which will be utilised for the preparation of the new standard.

(*d*) As regards the sero-diagnosis of syphilis, further laboratory investigations have elicited the reasons for the discrepancy between the results obtained by workers with the Sigma reaction after the Copenhagen Conference and the observations made at the Conference.

I beg to recall a memorandum (C.H. 223) on the replies received from the different Health Services, to which I have, in accordance with your desires, transmitted certain recommendations of the Copenhagen Conference with regard to the details of the carrying out of the Wassermann test and the special conditions under which sero-diagnosis should be carried out. At that time, 19 administrations, out of the 55 to which the circular was addressed, had sent their replies. We have since received a series of replies, detailed in Appendix 5.

I should like to point out, in particular, the reply from Great Britain. You will note that a circular from the Chief Medical Officer of October last, addressed to all the laboratories carrying out the Wassermann and the Sigma tests, suggests the adoption of the symbols and definitions recommended by the Copenhagen Conference and asks for an opinion as to the practical value of these recommendations. A further circular of the Health Ministry dated November 24th resumes the replies, showing that the great majority of serologists had been using similar methods and that those who had not yet adopted the recommendations were disposed to do so.

The Health Services of the Irish Free State have adopted a system of designation of results in conformity with the Copenhagen recommendations for all the official laboratories in which the Wassermann reaction is carried out free of charge.

The Sanitary Administration of Japan, while raising no objections to the conclusions of the Copenhagen Conference, anticipates certain difficulties in their practical application at the present time.

The Ministry of Health of Czechoslovakia was particularly glad of the initiative taken by the Health Committee and emphasises its complete agreement with the suggestions made.

(*e*) Laboratory investigations on the standardisation of biological products were continued and we have received valuable memoranda dealing in particular with the assaying of digitalis and the pituitary extract. Professor H. H. Dale, who is acting as Director of Biological Researches, has drafted a short memorandum (C.H. 276) detailing the progress accomplished during the last few months (Appendix 6).

In accordance with Professor Dale's suggestions, your President approved the proposal of convening a Conference next autumn of the workers engaged in the standardisation of biological products, which will continue the work of the First International Conference which met under your auspices at Edinburgh in July 1923. The standardisation of pituitary and thyroid extracts, of digitalis, of insulin, of ergot, and of salvarsan will be discussed in detail by the Conference and it is hoped that recommendations will be made in respect of the majority of the test methods.

I am giving merely a main outline of these various investigations, on which your President, as Chairman of the Permanent Standards Committee, will no doubt desire to give you his views.

2. *The Commission of Experts on Sleeping-Sickness and Tuberculosis in Equatorial Africa.*

This Commission is submitting to you a further detailed and very valuable report on the prevalence of sleeping-sickness. The Commission will meet at an early date in connection with the Conference on Sleeping-Sickness to which we have already referred.

3. *The Commission on Instruction in Public Health.*

We have endeavoured to obtain detailed documentation in respect of the several countries, and particularly of those which are to be visited by members of the Commission. Our request was addressed either to members of the Health Committee or to professors of public health indicated to us by the Directors of the Health Services. We have received from Dr. Jitta a most interesting memorandum (Appendix 7) on his country and from Professor Nocht a general memorandum (Appendix 8) giving the programme of teaching in the German universities, technical schools and institutes of social medicine. From Italy we have received memoranda from Professors di Vestea and Manfredi on the curriculum on public health for the Universities of Pisa and Palermo. A very complete report on the general and technical training in public health was sent by Dr. Timbal of Belgium.

Your President will no doubt report to the Commission on his study in Norway and Professor Ottolenghi on the observations made in Switzerland.

The Chairman of your Commission will wish to present to you a detailed progress report.

4. *The Cancer Commission.*

The Commission is convened by the Chairman at Geneva on April 18th for the presentation of a Progress Report. The Committee will remember that a special Statisticians Commission was set up to advise the Cancer Commission on the statistical aspects of the studies undertaken in Great Britain, the Netherlands and Italy regarding the mortality from cancer of the breast and of the uterus. The Statistical Commission will also meet during the session.

5. *The Malaria Commission.*

The fourth session of the Malaria Commission was held at Geneva from March 23rd to 26th, preceded by a meeting of a special Drafting Committee appointed by the Commission to prepare a final report on the tour of investigation in the Balkan countries, Russia and Italy, undertaken by the Commission last year. I hope to be able to submit at the present session the final draft of this report, which was adopted unanimously at the Geneva session of the Commission.

The Commission decided to undertake this year a further joint study of the malaria situation and anti-malarial measures in Palestine, Syria and Sicily. Very full arrangements have been most kindly made by the Health Services of Palestine, Syria and of Italy for this tour, which it is proposed to begin on May 1st. The members participating will sail from Brindisi on May 2nd, returning to Naples from Sicily on June 26th.

The Committee will be particularly glad to learn that Professor Samuel T. Darling, of the International Health Board of the Rockefeller Foundation, has accepted our invitation and will join the Commission on its tour in the Near East.

The Commission, with the approval of your President, has co-opted as corresponding member Professor S. T. Darling, Col. Christophers from British India and Professor Brumpt of the University of Paris.

Having accepted the French Government's request for a malaria survey of Corsica, the Commission delegated two of its members, Dr. Raynaud and Professor Marchoux, who began their enquiry in the first week of April and be able to present a first provisional report for the present session of the Committee.

In accordance with the decisions taken at your October session, we have obtained from several European countries indications as to the hospitals in which a comparative test of the value of secondary alkaloids of cinchona will be carried out. The Commission has adopted a definite method for this test and has selected both the institutions which should carry it out and the drugs to be used in the test. Pending the result of these enquiries no definite proposals have been formulated for your consideration regarding the proposed International Conference on Quinine, which will probably have to be postponed until next year.

The Commission considered a plan for international studies and research of malaria for the benefit of medical officers desirous of qualifying as malariologists as well as for malariologists in charge of anti-malaria measures in the various countries. It is proposed that the curriculum of these studies comprise: (*a*) a five-week period of tuition or research at the Institutes of Tropical Medicine in London and Hamburg and the Laboratory of Parasitology at the Paris University; (*b*) a two- to three-month period of field work at two or three of the anti-malaria stations selected from a list, composed of one station in Corsica, two or three stations in Italy, two in the Kingdom of the Serbs, Croats and Slovenes, two in Spain and two or three in Palestine. The choice of the two or three stations will be made so as to enable the participants by a three-month study to learn the solutions which are given to the different aspects of the malaria problem. On these recommendations I have ascertained that Professor Nocht, Dr. Balfour and Professor Brumpt will be ready to collaborate in this joint scheme. A draft of a laboratory malaria programme, drawn up by Professor Brumpt, is now being considered by Drs. Nocht and Balfour.

I have permitted myself to give these indications on the work requiring action arising out of the recommendations of the Commission, which will be fully presented to you by its Chairman, Dr. Lutrario.

## V

## THE PARTICIPATION AND REPRESENTATION OF THE HEALTH ORGANISATION IN THE WORK OF CONFERENCES AND CONGRESSES.

1. I have already had the honour to refer to the Pan-American Sanitary Congress, held in November last at Havana, at which we were represented by Dr. F. Norman White. He was able to discuss fully all the aspects of your work with our colleagues from Latin-America, amongst whom there were several Chiefs of Health Services. Surgeon-General Cumming and the officers of the United States Public Health Service, as well as of the Pan-American Sanitary Bureau, gave him a very cordial welcome, and he was able to discuss with them detailed plans of continuous collaboration.

2. The Committee will be glad to learn that the Institute of Tropical Diseases at Skoplje, in Macedonia, organised by Dr. Stampar, will be opened on April 5th. This great institution will afford a permanent scientific basis for extensive anti-malaria measures and the general public health activities undertaken under Dr. Stampar's energetic leadership in that part of the Kingdom of the Serbs, Croats and Slovenes. He has invited our Organisation to attend the opening ceremony, and, after consultation with your President and with the Chairman of the Malaria Commission, I have asked Dr. Norman V. Lothian to represent the Health Organisation of the League.

3. The Committee will remember that a Pan-Pacific Food Conservation Conference was held at Honolulu in August 1924. A Japanese member of the Secretariat, Mr. Ken Harada, who was returning from home-leave to Geneva, was able to attend the Conference on behalf of the Secretariat. You will be interested to know that, amongst the scientific papers read at this Conference, there was one by Dr. Wu Lien Teh, Director of the Manchurian Plague Prevention Service, on "Quarantine Problems in the Far East", in which the plan of a Far Eastern Epidemiological Intelligence Bureau was taken up on the basis of your suggestions to the Council.

The Director of the Pan-Pacific Union, Mr. Alexander Hume Ford, informed us that it is proposed to hold, in 1928, a Pan-Pacific Red Cross Conference. I assume that you would desire our Far Eastern Bureau to keep in touch and afford any assistance which may be necessary in this connection.

4. The International Council of Nurses will meet for the first time since the war at Helsingfors from July 20th to 25th. This Council, of which Mrs. Bedford Fenwick, of London, is the Honorary

President, is presided over by Baroness S. Mannerheim, of Finland, and includes as members the Nurses' Associations of America, Canada, Denmark, Belgium, Germany, Italy, Great Britain and Ireland, New Zealand, Norway, the Netherlands, South Africa, China, Finland and India.

The President of the International Council has extended an invitation to the Health Organisation to be present at the Helsingfors meeting.

5. *The International Congress of Malaria.* — The Committee will be aware of the invitation extended to you and to the Malaria Commission for participation in the preparatory work of and for a representative at the first International Congress of Malaria, which the Italian Government has convened at Rome for October 6th, 1925. The Malaria Commission, at its recent session, proposed delegating its Chairman, Professor Nocht, Professor Pittaluga and Colonel James as its representatives. It is understood that this delegation will work in close collaboration with the other members of the Malaria Commission, who will participate in the Congress as representatives of their Governments.

6. The Austrian Federal Health Service has organised for this spring a Health Exhibition at Vienna, which is combined with the exhibit of the Dresden Museum "Der Mensch". The Austrian Sanitary Administration has invited your President and the Health Section to visit this exhibition.

7. The League of Red Cross Societies is organising a second conference of Eastern and Central European Red Cross Societies, which will be held from Monday, May 11th, to Friday, May 15th. They express their earnest hope that, in view of the precedent established at the time of the First Eastern European Red Cross Conference, held at Warsaw in 1923, when your Medical Director participated as your representative, their invitation might be accepted.

## VI

## ADVISORY OPINIONS FOR GOVERNMENTS.

The Committee will remember that it decided to discuss at its next session the reports presented by its investigators, Dr. John Gilmour and Dr. Haigh, on surveys undertaken at the request of the national Governments of Persia and Albania.

I had the honour to distribute Dr. John Gilmour's report on January 15th, 1925. Dr. Haigh's report was fully analysed by the Malaria Commission, which will submit for your consideration certain recommendations.

The Committee will, no doubt, desire to frame, on the basis of the reports of your investigators and the technical opinions of your Commissions, definite advice to the Council of the League containing suggestions for the Governments of Persia and of Albania.

May I be permitted to say how greatly we have appreciated the competent and valuable collaboration of Dr. Gilmour and Dr. Haigh.

## VII

## MISCELLANEOUS.

1. The Committee will learn with regret that neither Professor Chagas nor Professor Mimbela will be able to attend the April session. They both hope, however, to be present at the autumn session of the Committee.

2. I attach for the information of the Committee a classified list of our publications (Appendix 9).

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C.H. 285.

**Appendix 1.**

## QUESTIONNAIRE REGARDING THE PREPARATION AND TITRATION OF TUBERCULIN.

### A. *Preparation of Tuberculin.*

1. What types of tubercle bacilli do you employ ?
2. What is the composition of your medium ?
3. What is the initial PH of your medium ?
4. For how long is the culture incubated ?

5. Is the culture killed before filtration:
   By heat ?
   By some other process ?
6. Is the volume of the culture reduced by evaporation before or after filtration ?
7. Do you carry out filtration by:
   Filter paper No. Mark?
   Candle No. Mark?
8. Do you sterilise the filtrate thus obtained:
   By heat ?
   By any other process ?
9. Does the raw tuberculin you prepare represent a mixture of several tuberculins obtained from different types and strains of tubercle bacilli ?
10. If such is the case, what are the proportions of human, bovine and avian tuberculins in the mixture ?
11. Do you issue your tuberculin in diluted form ?
12. If so, to what dilution of the raw tuberculin does it correspond ?
13. Do you add to your prepared tuberculin any preservative substance ? If so, what is the nature and proportion of the substance added ?
14. (*a*) Do you make any preparations other than Koch's raw tuberculin ?
    (*b*) If so, please indicate, briefly, the process of their preparation, and their properties and characters.
    (*c*) Are they intended for diagnosis, or for therapeutic purposes ?
    (*d*) Do you prepare and issue special dilutions of raw tuberculin or of other tuberculins (which ?) for the various cutaneous and intradermal reactions ? In what form are these issued ?

B. *Method of Titration of Tuberculin.*

15. Do you make regular titrations of your tuberculin ?
16. Is titration obligatory by law ?
17. Do you make the titration on tuberculous guinea-pigs ?
18. What is the procedure followed and the type of bacillus used in rendering the guinea-pig tuberculous ?
19. Do you make a preliminary test to determine if the guinea-pigs are suitable for use in the definitive titrations ?
20. By what route do you introduce into the tuberculous guinea-pig the tuberculin which is being titrated ?
21. Do you carry out titration against a standard tuberculin, or do you simply determine the toxicity of your tuberculin by its effects on the guinea-pig ?
22. (*a*) From what laboratory does the standard tuberculin come ?
    (*b*) For how long have you used it ?
    (*c*) Do you keep it in liquid or in solid form ?
    (*d*) Is it stable ?
    (*e*) From what types has it been prepared ?
23. Do you do a preliminary titration before the definitive one is carried out ?
24. In carrying out the latter, do you use one or several methods ?
25. Is titration done in vitro ? If so, is the process based on the principle of:
    — complement deviation ?
    or — precipitation ?
    or — other biological reaction ?
26. Is the titration of tuberculin carried out on the raw product, or after its dilution ?
27. Is the tuberculin submitted to any other tests than those for determining its specific toxicity ?

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**Appendix 2.**

Geneva, April 1st, 1925.

## REPORT OF THE COMMITTEE STUDYING THE DEFINITION OF DEAD-BIRTH.

The need of a definition of the term "dead-birth" [1] has been considered on many occasions by conferences and committees, national and international. A summary of their conclusions will be found in the Appendix to this report.

It does not appear to the Committee to be necessary to emphasise the urgent need of an international agreement as to the meaning to be attached to the term "dead-birth", as such need is

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[1] This term is used here in preference to "still-birth", as it is more in accordance with the phraseology of the most recent English and American text-books on midwifery. Again, the term "still-birth" is used by English writers and obstetricians as the equivalent of the Latin term "*asphyxia neonatorum*", of the French "*mort apparente de nouveau-né*" and the German "*Scheintod*". Lastly, "dead-birth" can mean nothing else but the birth of a fœtus which is not transformed into a living child.

universally recognised. It will suffice to observe that, without an agreed definition and without uniform rules as to the tabulation of births, international comparability of statistics of fecundity (birth-rates) and of infant mortality (at ages under one year) cannot be attained.

In drafting the proposed definition of "dead-birth", the Committee has kept in mind the fact that the suggested definition is intended for the guidance of those concerned with the registration of births and for that of statisticians — not of jurists. It is permissible, however, to hope that, if international agreement be arrived at, the definition, whatever its final form may be, will be accepted for all purposes.

Owing to the fact that, in a large proportion of instances, lying-in women are attended by midwives, or by women untrained in midwifery or medicine, it is essential that the proposed definition should be based on a test which is easy of application by persons possessing little or no medical knowledge or skill. Fortunately, this condition is fulfilled by the test of respiration — a test not only scientifically accurate but obvious even to the untrained observer.

The definition of dead-birth now submitted involves the consideration of certain points in fœtal physiology and of certain terms expressive of those points:

(a) *Fœtus.* — Fœtal existence is *intra-uterine* existence and is maintained by placental respiration. Infant existence is, on the other hand, *extra-uterine* existence and is maintained by pulmonary respiration.

It is of extreme importance to define clearly the end of fœtal existence — a task which is not difficult. A fœtus becomes an infant as soon as it has breathed, or, more precisely, as soon as its existence depends on oxygen obtained from its lungs and not on that obtained from the placenta. The transition from fœtus to infant is a metamorphosis, which is determined by the establishment of pulmonary respiration.

Fœtal existence, in relation to its environment, passes through three stages:

(1) In the quiescent uterus, during pregnancy, a long *ante-natal* stage;
(2) In the active uterus, during labour, a short *intra-natal* stage;
(3) After birth, a transient but variable *post-natal* stage before the establishment of pulmonary respiration announces that fœtal existence has ended and that infant existence has commenced.

The stage of post-natal fœtal life deserves careful notice, for around it has gathered the confusion and controversy about the definition of the terms "live-birth" and "dead-birth". In most cases this stage is a transient one, and pulmonary respiration is established almost simultaneously with birth, that is, the fœtus becomes an infant directly or almost directly it is born. But in other cases this stage is more prolonged and may even be delayed for as long as half an hour. In such cases the heart of the fœtus is beating, but the fœtus makes no movement: it may be rigid and blue, or limp and white. In England, the names "asphyxia of the new-born, blue or white" (or still-birth) is given to this condition; in France, it is termed "*mort apparente du nouveau-né*"; in Germany, "*Scheintod*". Sooner or later, the fœtus begins to breathe spontaneously, but sometimes methods of artificial resuscitation have to be employed.

(b) *Fœtal death.* — The fœtus dies when its heart ceases to beat. Fœtal death may occur at any of the three stages of its existence:

(1) Death during pregnancy — ante-natal fœtal death; these fœtuses are in most instances macerated when born (the cause of death is usually some maternal or placental disease).

(2) Death during labour — intra-natal fœtal death; these fœtuses are not macerated. The heart is not beating at birth (the common causes of death are intra-cranial injury, prolonged labour, prolapse of cord, separation of placenta, etc.).

(3) Death after labour — post-natal fœtal death (the common causes are severe head injuries due to difficult labour). At birth the heart is beating and continues to beat for a variable period, sometimes as long as for half an hour, before death occurs. *There is no attempt at respiration; the fœtus dies as a fœtus; it has never become an infant.* Methods of resuscitation are always tried in these cases (artificial respiration, etc.). Post-mortem examination shows that these fœtuses, with very rare exceptions, have severe intra-cranial injuries (tears of the *tentorium cerebelli* and cerebral hæmorrhage).

(c) *Viability.* — In proposing that a gestation of not less than seven months (twenty-eight weeks) shall be the term of development required for a "viable" fœtus, the Committee has had in mind the very great difficulty of rearing an infant born after a shorter period of gestation. It is hardly too much to say that the survival of an infant born before the end of the twenty-eighth week of pregnancy is an event worthy of special record. It is rare, except when special facilities — *e.g.*, provision of an incubator — are available. The adoption of the Committee's proposal will not mean that the birth, at an earlier stage of gestation, of a fœtus in which pulmonary respiration becomes established is not to be regarded as a "live-birth" (as hereafter defined); but it will

mean that a birth before the end of the twenty-eighth week of pregnancy of a fœtus in which respiration is not established is not to be counted as a "dead-birth" but as a "miscarriage" (abortion).

Where registration as a dead-birth is required in the case of a shorter gestation than 28 weeks — *e.g.*, Switzerland (six calendar months), Japan (four months) — the adoption of the Committee's proposal need involve no change in legislation. In such instances, only those births which take place after the twenty-eighth week of gestation should be included in the principal (international) tabulation. Supplementary tabulations for national purposes could be given, showing the number of births occurring after gestations shorter than twenty-eight weeks.

## Proposed Definitions.

It is requisite, in drafting the desired definition, to have a clear understanding of what constitutes a "birth" and when such "birth" is "complete".

In the proposed definition, the word "birth" means the separation and extrusion of a fœtus from the body of the parturient woman. The birth is to be deemed complete at the instant when the whole of the body of the fœtus — head, trunk and limbs — is outside the body of the mother.

The birth is to be deemed a live-birth if, after birth (as defined above), the infant breathes.

The act of respiration is incontrovertible evidence of life, and its continued absence is to be taken as proof of fœtal death.

It is desirable, for statistical purposes, that a distinction should be made between the birth of a fœtus which can normally be expected to be capable of an existence independent of its mother and the expulsion of one which cannot, births in the latter category being regarded as miscarriages (abortions).

A fœtus capable of an independent existence is a "viable fœtus" and is the product of a gestation which has lasted at least twenty-eight weeks. Such fœtus will normally measure at least 35 cm. from the crown of the head to the sole of the heel, the body being fully extended. We are of opinion that the latter criterion is the more trustworthy.

Hence, a "dead-birth" is the birth of a fœtus, after twenty-eight weeks' pregnancy, in which pulmonary respiration does not occur; such a fœtus may die either: (*a*) before, (*b*) during, or (*c*) after birth, but before it has breathed.

## Suggestions as to the Records to be Kept.

It is desirable that every live-birth should be entered in the *Register of Births*. An infant born alive but dying before registration of its birth should be entered both in the register of births and in that of deaths, the prescribed certificate of cause of death being produced at the time of registration or subsequently thereto, as may be by law directed.

It is desirable that every dead-birth should be inscribed in a *Record of Dead-Births*. The person responsible for the registration should be required to produce, whenever possible, a certificate of cause of death, such certificate to be signed by a recognised medical practitioner. The information to be given in the certificate and the form thereof should be prescribed by the competent authority.

In countries requiring the registration of births of non-viable fœtuses (as defined above), such births should, we consider, be entered in a separate record, with such information as to duration of pregnancy, cause of abortion and other particulars as may be prescribed by the competent authority.

## Rules for Compilation of Statistics.

Statistics of *natality* — birth-rates — will be based on the number of live-births.

Statistics of *fertility* will be based on the number of *viable* births, both live- and dead-births.

Rates of *infant mortality* will be based on the numbers of live-births and of deaths of infants under the age of one year (12 months).

In concluding its report, the Committee desires to represent to the Health Committee of the League of Nations the need of a list of causes of dead-births for international adoption and use.

Geneva, March 24th, 1925.

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## Appendix.

## ABSTRACT FROM THE PRELIMINARY REPORT, PREPARED BY THE HEALTH SECTION IN 1924, ON THE LACK OF UNIFORMITY IN THE DEFINITION OF STILL-BIRTHS.

No international agreement has ever been reached on the definition of still-births.

Uniformity in definition is important, for the following reasons:

(1) In order to make possible statistics of still-births comparable;
(2) In order to render statistics of live-births accurate and comparable;
(3) In order to render statistics of infant mortality, especially in the first days of life, more accurate and comparable.

The definition of a "still-birth" involves a clear distinction between a *live-birth*, on the one hand, and a *miscarriage* on the other, and, consequently, an agreement as to the signs indicating life as well as to the length of gestation which is to be accepted as necessary for the production of a viable fœtus.

### Differences in Definitions used in Various Countries.

A complete account of the rules and regulations prescribed in the various countries for the guidance of officials concerned with the registration of still-births will be found in the report of the Committee appointed by the Royal Statistical Society which was published in 1912. Since that report was published, there has been no substantial alteration in the procedures described. A perusal of that report indicates the almost complete lack of uniformity existing in those rules and regulations. It does not appear to be necessary to recite at length what is so completely set out in the report mentioned.

### Additional Questions Involved.

Apart from the very divergent instructions regarding the registration of still-births in use in the various countries, it may be well to point out that the principles governing the tabulation of the data based on such registration are equally divergent. While in some countries, such as Sweden, Bavaria, Austria, Hungary and Serbia, still-births are registered on birth certificates, in others, such as Prussia, Wurtemberg and Roumania, they are registered on death certificates, while in others again they are registered on separate certificates, as in Holland, France, Switzerland, Spain and Bulgaria. In Germany, still-births were counted, until recently, both under births and deaths, and figured so in the published statistics.

The question of legitimacy seems to be asked in all countries. The important question as to the duration of the gestation is asked in Holland, Switzerland, Portugal, Canada and Japan. The apparent cause of the still-birth is given, when possible, in Holland and Switzerland. No attempt has ever been made to prepare an international list of the causes of still-birth.

### Uniform Definitions Hitherto Proposed.

In addition to the report of the Royal Statistical Society already mentioned, important enquiries into this subject have been made by the "Bureau de la Statistique générale de la France" (Lucien March), by the International Institute of Statistics (Methorst), and mention should also be made of the report drawn up at Brussels in 1910 by the Congrès d'hygiène et de démographie.

*The Committee of the Royal Statistical Society* expressed the opinions: (1) that it was desirable that an international definition of "still-birth" should be adopted; (2) that still-births should be registered. The report contains the following draft definition of "still-born":

> "A still-born child means a child born after a period of gestation of not less than seven lunar months (twenty-eight weeks) whose heart has ceased to perform its functions before the whole of the body (including the head and limbs) of such child has been completely extruded from the body of the mother."

*The American Public Health Association* has recommended the following rules (see "Mortality Statistics, 1909", Bureau of the Census):

> "(1) For registration purposes, still-births should include all children born who do not live any time whatever, no matter how brief, after birth.
>
> "(2) Birth (completion of birth) is the instant of complete separation of the entire body (not in the restricted sense of the trunk, but the entire organism, including head, trunk and limbs) of the child from the body of the mother. The umbilical cord need not be cut nor the placenta detached in order to constitute complete birth for registration

purposes. A child dead or dying a moment before the instant of birth is a still-birth, and one dying a moment, no matter how brief, after birth was a living child and should not be registered as a still-birth."

The following draft definition of the term "still-birth" was submitted for adoption by the *International Institute of Statistics* at the meeting of the Institute in 1913 [1]:

> "A 'still-born child' means a child whose body at birth measures not less than 32 cm. (13 in.) in length from the crown of the head to the sole of the heel, who, when completely born (the head, trunk and limbs of the child, but not necessarily the after-birth, being extruded from the body of the mother), exhibits no sign of life — that is to say: whose heart has ceased to function as demonstrated by the absence of pulsations in the cord at its attachment to the body of the child and absence of any heart sounds or impulses.
>
> "A 'still-birth' means and includes the birth of a still-born child.
>
> "*Note.* — Crying and/or breathing — being secondary signs of life manifested only when the heart is acting — can be relied upon as signs of life, but the absence of either or both is not to be held to be proof of the absence of life in the child."

The Institute declined to express any opinion on the draft definition and passed the following resolution:

> "The Institute recommends that the international medical organisations should be invited to prepare a definition of 'still-birth' in order to assure a better basis for statistics of births and still-births and to provide for statistics of abortions."

A committee was appointed by the Institute "to report upon the available statistics of births and still-births and to suggest amendments necessary thereto", but, owing to the outbreak of war in 1914, the committee accomplished nothing. It was not re-appointed at the meeting of the Institute in 1923.

These proposals are mentioned not as recommendations but only for what value they may be found to possess in the course of further study on the subject.

### Recommendation as to Further Study.

In view of the great importance of a uniform definition on this single point, a recommendation has been made to the Health Committee of the League of Nations that a special committee of experts be appointed to advise and collaborate with the Health Section on a further study of the question with a view to submitting to the Health Committee a recommendation or recommendations. This special committee would be composed of experts qualified to assist both in a medical and statistical capacity, and the views of the various statistical offices and public health services could be ascertained in the course of this study.

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## Appendix 3.

C. H. 288.

## REPORT OF THE GROUP ENTRUSTED WITH THE STUDY OF THE CAUSES OF DEATH.

The Committee engaged in the study of the difficulties involved, for international comparability, by the necessary selection for tabulation of a single one out of several causes of death returned upon the certificate of a single death ("Joint Causes Group") commenced its study of this question by an interchange of written expressions of the views of its members, these being focussed upon the incomparability resulting to the various national tabulations of cause of death from divergent procedure in regard to this matter by the previous circulation to members of the Group of a review of the present position prepared by the Health Section (C.H. 168).

After this interchange of written communications had continued for the greater part of a year, it became evident that a personal interchange of ideas was essential to the attainment of any early agreement upon a policy which the Group could recommend for the consideration of the Health Section.

A meeting was therefore called in Geneva for March 12th, but unfortunately it was possible for only two (Dr. Rosenfeld and Dr. Stevenson) of the four members of the Group to be present. Dr. Davis was, naturally, unable to make the journey from Washington for this purpose, and Dr. Roesle was unhappily prevented by other engagements from attending. The meeting so constituted,

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[1] Bulletin, Vol. XX (ii), p. 146; (i) 146.

and with the services of Mr. Stouman as interpreter as well as his collaboration as an expert in the subject under discussion, had before it a memorandum prepared by Dr. Stevenson, embodying a proposal for dealing with the difficulty by securing improved information upon the death certificate, thereby enabling the tabulator to base his selection of a single cause for tabulation upon information provided by the certifier as to the mutual relations of the several causes stated on his certificate.

As a result of this consideration, the Group is now enabled to make the following recommendations:

## Recommendations.

### 1. *Standard Form of Certificate of the Cause of Death.*

The advantages of substantial international uniformity in this matter scarcely require demonstration. It is obvious that, if the questions put to medical practitioners in different countries differ materially, the answers received must also differ correspondingly and that the material for tabulation must therefore vary to some extent with the form of the certificate in use. If the nature of the material tabulated differ in the various countries, the results of its tabulation must be to some extent incomparable on this account. This is the present position.

In some countries — France, Germany, the Netherlands, etc. — only the "cause of death" is asked for, no suggestion being made to the certifier that the entry of more than a single cause would ever be appropriate, and no instructions being given him for his guidance in selecting that single cause from all those which he may recognise as having contributed to the death. Naturally, this policy presents infinite possibilities of variation in the method of selection pursued by the certifier. When faced by any of the more commonly occurring combinations of cause of death, such as influenza and pneumonia, appendicitis and peritonitis, or, indeed, by any combination whether of frequent occurrence or not, certifiers so left to themselves cannot be expected to make a uniform choice from amongst the causes competing for attention. In the case of the first-mentioned combination, some will naturally conside influenza as the cause of death, on the principle that *qui facit per alium facit per se*, while others will, perhaps as naturally, argue that, since the patient undoubtedly died from pneumonia, pneumonia was the cause of death. Much the same may be said of appendicitis and peritonitis, or, indeed, of any other combination of related causes, frequent or rare.

In Japan, this policy is carried even further, the certifier being expressly instructed not to enter more than one cause on the certificate, but in this case he is furnished with admirable instructions to guide his choice. This plan, however, is open to the objection that no evidence is afforded whether the certifier has intelligently applied his instructions, or, indeed, whether he has paid any attention to them whatever. And it has the further disadvantage of destroying all possibility of tabulation by more than a single cause, although this procedure can often be made to supply useful information not otherwise obtainable.

The forms in use in many other countries, however, do suggest that, in appropriate cases, more than one cause should be mentioned. But this suggestion takes different forms, distinguishing the causes to be stated in different ways, which must lead to differences in the material provided by the certificates. The Swedish form calls for (1) the principal and (2) contributory causes. Here it will be noted that no information is required as to the inter-relation of the causes stated, except that one is of more importance than the rest. In most other countries, information is called for as to the mutual relationship of jointly stated causes, but this is done in differing ways, which, again, must be presumed to affect the results obtained.

The relationship between the causes of death returned of which a statement is most frequently called for is that of causation, though that of importance (as in the Swedish form) is also frequently in evidence. Examples of this variant will be found in the British (those in use being generally similar, but not identical, throughout the Empire) and United States forms, both of which call for statements of causal relationship and, having done so, obscure the issue by suggesting that the reference of the statement may alternatively be to order of importance. For instance, if the form employed in England and Wales be referred to, it will be seen that the terms "primary" and "secondary" are defined as referring to causal relationship, but that the certificate is so worded that cause No. 2 may be not secondary but contributory — *i.e.*, it is made impossible to tell with certainty, however carefully and well the form is filled in, whether the relationship indicated between the causes returned is that of causation or of importance. Much the same may be said of the American standard form of death certificate, now in use in nearly all the registration States and cities. This calls for (1) the cause of death and (2) contributory (secondary) cause. Here the position is much as in England, except that no indication is given by the main heading — "the cause of death" — whether reference is made to the primary or to the principal cause. (A cause secondary as regards causation to another, or primary, cause, may obviously take a predominant share in actually determining death, or, in other words, be the principal cause of death, as in the instance of influenzal pneumonia quoted above.) As in the English form, the two relationships of causation and importance are thoroughly confused by heading No. 2, the only difference being that, in this case, the relationship of first choice is that of importance, with the alternative

suggestion of causation, whereas in the English form the principle of variety is maintained by reversing the position of cause and relative importance as first and alternative choice. But in both cases the same result is secured — the tabulator is effectively prevented from knowing what the certifier means.

From this it may be deducted that two relationships between jointly stated causes are of interest to the tabulator — that of causation and that of importance. But neither England nor America has decided upon which leg to stand. The matter has been more logically dealt with in Switzerland, where both relationships are separately asked for, the questions being:

(1) Primitive disease or primary cause;
(2) Consecutive disease and immediate cause of death;
(3) Contributory diseases or circumstances worthy of mention.

It may be mentioned that similar lines are followed by the instructions on the Japanese form for filling in the single cause of death permitted, *i.e.*, the two relationships of cause and of importance are separately indicated and dealt with.

It is hoped that this comparison of current forms will suffice for two purposes: (1) to demonstrate the confusion of the present situation in this respect and the international incomparability which must arise from it; and (2) to indicate the lines on which to proceed in framing a form to recommend for international use in order to put an end to this confusion.

We have come very definitely to the conclusion that such an international standard form (subject to minor national variations of the letter which leave the spirit intact) should be recommended for use by the League of Nations; and we are further of opinion that the form suggested below may be recommended as embodying the considerations which experience has shown to be necessary to the intelligent selection of a single cause for tabulation in a clear and logical manner. This form is as follows:

CAUSE OF DEATH

| | *Principal Cause.* | *Independent contributory cause,* if important (not casually related to principal). |
|---|---|---|
| | 1. Immediate cause. | |
| Causes antecedent to above in order of relationship. | due to 2. | |
| | due to 3. | |
| | due to 4. | |

*In most cases it will suffice to state the principal cause, reserving statement of contributory causes for instances where the deceased succumbed to a combination of maladies none of which would necessarily have been fatal by itself. In such cases the certifier's judgment alone can afford guidance as to the cause to be selected as principal,* i.e., *the cause chiefly contributing to the death and under which the death should be tabulated.*

*By the immediate principal cause is meant the morbid condition actually causing death, and by causes antecedent to it any others of which it was the consequence. If more than one of these is entered, the order of relationship should be preserved,* e.g., (1) *cerebral hæmorrhage,* (2) *arteritis* (3) *syphilis* (1) *broncho-pneumonia* (2) *measles,* etc.

### 2. *Use of this Form in determining Selection of One from several jointly stated Causes.*

It will be seen that this form calls upon the certifier in all cases for a definite statement of the relationship to each other or jointly stated causes of death, (*a*) *quâ* importance and (*b*) *quâ* causation. Given a knowledge of the certifier's views on these points, we believe that it should be possible to frame international rules for the selection of a cause for tabulation in each case based upon the certifier's view of the circumstances of that particular death. Such selection would automatically solve the problem referred to this Group, as all countries using this form of certificate in the prescribed manner would thereby unite in accepting the guidance of the certifier as to the cause of his patient's death. The present situation has arisen because the information necessary for making an intelligent selection of the cause for tabulation in each case was not obtained from the certifier. It was therefore necessary, in the absence of this information, to substitute for it as means of selection certain general rules which might or might not apply to any given death. It follows, therefore, that, even if a single code of rules of this type were in use by all countries, the resultant uniformity of selection would only represent the facts (as recorded) in a certain proportion of instances. The better the rules the higher the proportion, but the best possible general rules most frequently fail in application to particular cases. Selection can only be successful in each case if based upon information relating to the same case, *i.e.*, that in the case of death X,

cause B was secondary as regards causation or importance to cause A, and should therefore not be selected for tabulation. If the decision is based upon general rules, all we can know is that causes of the nature of A are generally to be preferred to causes of the nature of B — the certifier alone can indicate to us whether in this particular case cause A should be preferred to cause B. We therefore believe that the way to secure uniformity in selection is not by adoption of a uniform code of general rules, which may or may not guide us aright in any given case, but by a uniform system of eliciting and applying the necessary information regarding each individual death. This we hope the proposed form of certificate will be found to do, but only the test of actual experience in its use can determine how far this anticipation is well founded. We would point out, however, that adoption of this form will commit no country to simultaneous change in the method of selection (of one from several jointly stated causes) employed by it. The more prudent and natural course would appear to be procedure step by step, first bringing the new form into use and noting its success or otherwise in eliciting from the certifier the information sought, and upon which intelligent selection might be based. This is the course which it is proposed to follow in England and Wales, where the proposal to bring the new form into use has already met with favourable consideration. It is of some importance that the various national offices to which the new form is submitted should realise that, by agreeing to give it a trial, they would not commit themselves in advance to that use of the certificate in determining selection for which it has been designed. It would be rather for each country to determine, by examination of the information obtained on the new form, when, if ever, the time had come when that information provided a means of selection superior to the existing general rules.

### 3. *Publicity.*

We think it of great importance that the introduction of the new form should be accompanied by a determined effort in each country to interest the medical profession in the matter of cause of death certification, pointing out its importance as a means of pooling and comparing professional experience — in fact, the only means generally available on a national scale. The value of the statistics of causes of death depends primarily upon that of the statements of cause received. We can greatly diminish this value by bad tabulation, but if the material tabulated is itself bad, no possible methods of tabulation can produce really good results from it. We must therefore realise how largely the situation is controlled by the certifying physician and aim at using every possible means in all countries to stimulate his interest, make him realise the importance of this task which none but he can discharge, and take steps to provide him with such help and explanations as experience may show that he requires for its efficient discharge.

For this purpose, we suggest that a resolution by the Health Section of the League of Nations, calling attention to the importance of cause of death certification and to the necessity of an effort to secure its increased efficiency, by ventilation of the subject in the professional Press, its inclusion in the medical curriculum and otherwise would be of great service. We attribute especial importance to the last-named point. At present the medical student, in many countries at least, never has his attention directed in any way to this portion of his prospective duties, and naturally therefore is inclined to infer that it can be of little real importance. But if, towards the end of his studies, he receives one or two lectures on this subject, pointing out the importance of the end product, in the form of the national statistics, and indicating the meaning of the terms employed upon the certificate form and how the difficulties liable to arise in filling it up may best be overcome, his attitude towards the subject would probably be altered, not only at the time when the possibility, however remote, of a question upon the subject at his qualifying examination might be of chief importance, but throughout the whole of his professional career. The very fact that the subject had been included in his curriculum would probably influence the whole of his future attitude towards the question.

The mechanism for securing these desired forms of publicity would naturally be that of approach to the governing bodies of the medical profession in each country, but their favourable consideration of such proposals when made to them would be powerfully promoted by such a pronouncement by the Health Section as has been suggested. It would be much easier with this backing for the representatives of the national health departments to go to these professional bodies, and, representing that an international movement for the improvement of death certification had been instituted by the League of Nations, to beg them to use their influence to see that their country did not lag behind in the race towards efficiency.

### 4. *Centralised Tabulation.*

It is only, however, in some countries, though fortunately in most, that the central statistical office is even in a position to be aware of the nature of the certificates received. In others these are sent in to district registrars or medical officers, classified and tabulated there, and only the numerical results forwarded to a central office for summation. Where this practice prevails, the central office is of course in no position to form a judgment whether the certification is in such a state that the proposed new method of selection would yield better results than the old. There can be

no doubt, however, that this system of tabulation is to be deprecated on many grounds, being incapable of central control and leaving the statistics at the mercy of the idiosyncrasies of the local tabulators, whose work is uncontrolled and whose results must in general be discrepant. The Health Organisation might therefore think it appropriate, in connection with the present subject, to make a general recommendation in favour of centralised tabulation as against local. The latter will commonly be found to be prescribed by law where it exists, and to be therefore difficult to deal with, but a very similar situation existed at one time in the United States, where registration is a function of the separate States, but where persistent effort has resulted in the voluntary attainment of a national federal system, with centralised tabulation in Washington for the whole population concerned.

It must be pointed out that international adoption of the proposed new form of certificate and agreement upon its suggested use in solving the problem of selection from jointly stated causes cannot be expected to do away entirely for the future with the need for international agreement upon points of detail in making the necessary selections for tabulation. As the certifier is given a free hand by the proposed form to trace the pathological history of his patient as far into the past as he cares to go, it will naturally follow that some men will push this matter much further than others. Some, for instance, will be satisfied with recording cerebral hæmorrhage as the cause of death; others will record arterio-sclerosis as the cause of the hæmorrhage; and still others may desire to mention the septic or other cause to which they attribute the arterio-sclerosis. The reason why the new form begins at the proximal end of the train of causation rather than at the distal ("primary cause") as formerly, is that we are thus assured in all cases of obtaining a statement of the cause required for tabulation — in this case, cerebral hæmorrhage. This assurance is not provided by return of the primary cause, which in this case is often stated as arterio-sclerosis. But such deaths are, from the tabulator's point of view, all essentially similar in nature and should be grouped together, however far the causation of the cerebral hæmorrhage is traced by the certifier. It would not do to assign some of them to cerebral hæmorrhage, others to arterio-sclerosis and others again to septic absorption regarded as the cause of the arterio-sclerosis, simply because one certifier stopped at one point and another at another. Hence it will be necessary to determine, for all such important chains of causation, the point at which they should be severed for statistical purposes. In the instance considered, this must obviously be at cerebral hæmorrhage, since probably most certifiers will not push the matter any further; but each such problem should, we believe, be independently considered on its own merits and a convention recommended for general adoption in order that the opportunities for international incomparability which would otherwise arise may be eliminated. The instance quoted illustrates one of the considerations which must govern decision on this point; others are the maintenance of the maximum degree of continuity with the pre-existing records based on the older systems, and the choice of a point of severance of the chain which will secure the maximum degree of significance for the results. The first point is self-evident, but the second may be illustrated by an example. Given a certificate of (1) *tabes dorsalis* (or general paralysis of the insane) due to (2) syphilis, it will obviously be better to sever the chain between the two causes specified than to trace the death back to syphilis. For, given tabes, we can assume syphilis, whereas given syphilis we cannot assume tabes. The most informative point, other things being equal, should therefore always be chosen.

But we do not consider that the situation will be ripe for international discussion of such conventions until the offices concerned have acquired experience of the working of the new system. For some years, while this is being acquired, the risk of continuance, in greater or less degree, of the present condition of incomparability must be accepted. But agreement on this matter, when the time is ripe, should be much more easily arrived at than on rules for selection of the type now in use. In the latter case, we are assuming that we do not know what view the certifier takes as to the relative weights of the causes mentioned by him, and assignments made in the dark in this fashion necessarily leave much room for difference of opinion; in the former case, we are dealing with a single definite sequence of pathological events, the certifier has laid all his cards on the table, and the materials for a reasoned and reasonable decision of common policy are therefore to hand.

The consideration of continuity just referred to suggests the question whether this is likely to be interfered with seriously by adoption of the new system. Speaking generally, such interference is a price which has to be paid for all reforms in procedure, and while it should not be lightly incurred it should not be accepted in every case as a contradiction of change — otherwise all progress would become impossible, not only improvement of method but even adaptation of method to changing circumstances. At the same time, preservation of continuity to the utmost extent compatible with desirable reform is a most material consideration. Fortunately, it is possible, in the light of recent experience, to suggest a method by which this end can be attained. When the International List of Causes of Death was introduced into English vital statistics in 1911 it happened to be convenient (for the purpose of maintaining a table already in existence which compared the number of deaths from each cause in each of a number of recent years) to present the facts tabulated upon the old system as well as upon the new. A fortunate result of this, not deliberately aimed at when the practice was instituted, was that, as the result of accumulating ten years' (1911-1920) experience of the results of the two tabulations, the proportionate relationship of the total deaths in any group of the new list to those in the most nearly corresponding group in the old was ascertainable, and thus, by applying a correcting factor, which in most cases was quite small, it was possible to carry back the figures under any heading of the new list into the old era as far as the results of that era were themselves comparable. We suggest, accordingly, that countries which attribute importance to the continuity of their records of cause of

death could provide a similar link in this case with the records of the past by tabulation, if only for a short period, both by the old method and by the new. It seems very possible that, in addition to safeguarding continuity, this method might be found to throw interesting new light upon the validity of the old results.

## Recommendations.

1. That a standard form of certificate of the cause of death should be recommended for general international use, adapted to elicit from the certifier the mutual relationships of the causes returned upon it.

2. That, apart from local variations in detail required to meet varying linguistic or other local circumstances, this form should be as follows:

### CAUSE OF DEATH.

| | | *Principal Cause.* | *Independent contributory cause,* if important (not casually related to principal). |
|---|---|---|---|
| Causes antecedent to above in order of relationship. | | 1. Immediate cause. | |
| | due to | 2. | |
| | due to | 3. | |
| | due to | 4. | |

*In most cases it will suffice to state the principal cause, reserving statement of contributory causes for instances where the deceased succumbed to a combination of maladies none of which would necessarily have been fatal by itself. In such cases the certifier's judgment alone can afford guidance as to the cause to be selected as principal,* i.e., *the cause chiefly contributing to the death and under which the death should be tabulated.*

*By the immediate principal cause is meant the morbid condition actually causing death, and by causes antecedent to it any others of which it was the consequence. If more than one of these is entered, the order of relationship should be preserved,* e.g., (1) *cerebral hæmorrhage,* (2) *arteritis* (3) *syphilis,* (1) *broncho-pneumonia,* (2) *measles,* etc.

3 That the information provided by this form should be used to determine the selection of a single cause for tabulation from certificates recording more than one cause of death.

4. That the recommendation of the new form of certificate should be accompanied by a resolution of the Health Committee of the League of Nations, calling attention to the importance of death certification and to the necessity of an effort to secure its greater efficiency, by ventilation of the subject in the professional Press, its inclusion in the medical curriculum, and in any other manner appropriate to the circumstances of each country.

5. That a resolution should be passed by the Health Committee of the League of Nations to the effect that the general adoption in all countries of centralised, as opposed to local, tabulation (under medical direction) of causes of death, would be a powerful means of promoting efficiency and comparability.

6. That the Health Section should continue its work in the promotion of uniformity in tabulation of causes of death with the ultimate object of a general agreement regarding the detailed application of the principles above recommended.

(*Signed*) T. H. C. Stevenson, C.B.E. (*Rapporteur*).

S. Rosenfeld (Dr.).

Geneva, March 14th, 1925.

**Appendix 4.**

# REPORT ON THE ACTIVITIES OF THE SERVICE OF EPIDEMIOLOGICAL INTELLIGENCE AND PUBLIC HEALTH STATISTICS FROM OCTOBER 1924 TO APRIL 1925.

At the request of the Medical Director, I have the honour to submit the following report, which summarises the progress accomplished by the Service of Epidemiological Intelligence and Public Health Statistics of the Health Section since the October 1924 session of the Health Committee.

The work has proceeded mainly along the lines indicated in the report submitted by Mr. Sydenstricker to the first session of the Permanent Health Committee in February 1924. It may be divided into the following parts, representing distinct spheres of action, although their final purpose is the same:

I. *Epidemiological Intelligence and Public Health Statistics.*

(*a*) Collection and Publication of Current Statistics on the Prevalence of all Epidemic Diseases.
(*b*) Telegraphic Reports on Dangerous Epidemic Diseases.
(*c*) Other Epidemiological Information.
(*d*) Special Investigations and Surveys.

II. *Improvement of Medical Statistics, especially of their International Comparability.*

(*a*) Study of the Comparability of Statistics:

1. Recommendations for uniform definitions of " dead-birth " (still-birth).
2. Recommendations regarding certification of causes of death.
3. Studies of other groups.

(*b*) Medico-statistical interchanges.
(*c*) Handbooks on the Organisation of Medico-Statistical Services.

## I. Epidemiological Intelligence.

### (a) *Current Epidemiological Statistics.*

Current information on the prevalence of epidemic diseases is now received from all European countries (except Portugal and Albania), from the whole of North America and Australasia and from practically all countries and colonies in Asia and Africa for which such statistics exist. These data are posted in permanent files and published regularly in the *Monthly Epidemiological Reports*.

The promptness with which data are received varies greatly: data for the Irish Free State are available in Geneva regularly five days after the end of the week, while for certain countries they are received after a delay of up to three months (Russia, Roumania, Haiti). The average time elapsing between the end of a reporting period and receipt of the data in Geneva and the number of days for a letter to arrive here are shown below for each country. Colonies from which data are obtained through a Colonial Ministry are not included:

## A. Reporting in Weekly Periods.

| Country | Letter reaches Geneva in (days) | Average days between end of reporting period and receipt in Geneva |
|---|---|---|
| *Europe:* | | |
| Austria | 1½ | 40 |
| Bulgaria | 1½ | 12–19 |
| Danzig | 2 | 9–12 |
| England and Wales | 1 | 9 |
| Germany | 1 | 26 |
| Holland | 1 | 9 |
| Italy | 1 | 19–24 |
| Irish Free State | 2 | 4–6 |
| Northern Ireland | 2 | 9 |
| Poland | 2 | 30–46 |
| Scotland | 1½ | 6–9 |
| Kingdom of the Serbs, Croats and Slovenes | 1½ | 31–48 |
| Switzerland | ½ | 10–14 |
| *Africa:* | | |
| Egypt | 6 | 15–22 |
| Southern Rhodesia | 22 | 28 |
| Union of South Africa | 19 | 31–32 |
| *America:* | | |
| United States | 10 | 19–23 |
| *Asia:* | | |
| China | 24–35 | 33–44 |
| Dutch East Indies | 20–24 | 33–56 |
| India | 15 | 51–58 |
| Japan | 20–31 | 40–60 |
| Siam | 25 | 37–65 |
| *Australasia:* | | |
| Australia | 26–29 | 51–72 |
| New Zealand | 30–34 | 38–47 |

## B. Reporting in Ten-Daily or Fortnightly Periods.

| | | |
|---|---|---|
| *Africa:* | | |
| Algeria | 3–4 | 12–15 |
| Tunis | 3 | 8–11 |
| *America:* | | |
| Cuba | 10 | 36–56 |
| Dominican Republic | 17 | 43 |
| Ecuador | 26 | 26–41 |
| *Europe:* | | |
| Belgium | 1 | 9–18 |
| Czechoslovakia | 1½ | 21–36 |
| Finland | 5 | 21–33 |
| Hungary | 1½ | 31–38 |
| Sweden | 3 | 17–21 |

## C. Reporting Monthly.

| | | |
|---|---|---|
| *Europe:* | | |
| Denmark | 1½ | 24 |
| Esthonia | 2 | 16–17 |
| France | ½ | 26–29 |
| Greece | 3 | 38 |
| Latvia | 2 | 20–67 |
| Lithuania | 2 | 27–43 |
| Norway | 3 | 21–24 |
| Roumania | 2 | 78–139 |
| Russia | 3 | 84–136 |
| Saar Territory | ½ | 12–26 |
| Spain | 2 | 50 |
| *Africa:* | | |
| Morocco | 3–4 | 17 |
| Nyasaland | 23 | 52–64 |
| *America:* | | |
| Canada | 10 | 54–78 |
| Haiti | 23 | 118 |
| Mexico | 16 | 51 |
| Panama | 22 | 38–47 |
| *Asia:* | | |
| Palestine | 8–10 | 43–48 |
| Persia | 14–18 | 68 |
| Turkey | 4 | 57–82 |

Delays in receipt have now been diminished in many instances by the collaboration of health administrations which have kindly furnished provisional data (Algeria, Bulgaria, Czechoslovakia, Denmark, Dutch East Indies, Egypt, Germany, Italy, Japan, Netherlands, Poland, Russia and the United States). We hope to obtain similar facilities from other administrations; but anything approaching a uniform degree of promptness in receipt of data cannot be hoped for so long as tardy transmission of reports from local authorities to central administrations prevails. It may be added that, in comparison with this, the delay involved in transmission by post is slight as regards European and North African countries, while, of course, more important in the case of more distant countries. Nevertheless, we receive data more promptly from the Union of South Africa, Shanghai and New Zealand than from Roumania or Russia.

It is essential, both for national administrative and international comparison purposes, that the notifications should be collected and tabulated at the shortest possible interval, and we beg to suggest that one month is too long a period for this purpose. The situation of an epidemic

may completely change within a month and before any indication is furnished by the figures. We receive at present current data from 87 countries, colonies or protectorates, which afford a good example of the usage throughout the world in this respect. The periods covered by the data are:

| | | | |
|---|---|---|---|
| Weekly . . . . . | in the case of | 26 | countries, etc. |
| Ten-daily. . . . . | » » | 4 | » |
| Fortnightly . . . . | » » | 17 | » |
| Monthly . . . . . | » » | 40 | » |

A proposal for uniformity in the periods covered by the reports of epidemic disease notification might possibly be formulated after obtaining the opinion of the national health administrations on the matter. Such an enquiry might also serve to furnish the necessary elements for considering the establishment of a World Registration Area, in accordance with the suggestion made by the late Dr. O. R. Eichel in his report to the last meeting of the Health Committee.

Although the current returns are usually sufficiently complete to indicate the trend of the diseases, they are frequently not final. At the end of each year a table is therefore prepared for each country and sent to the national health administrations concerned. The 1924 data have in this way been sent for verification to all countries, and replies containing the verified data have been received in all instances except for the farthest distant countries.

They have already been returned by:

Aden
Algeria
Austria
Basutoland
Belgium
British Guiana
Bulgaria
Ceylon
Cyprus
Czechoslovakia
Dantzig
Denmark
England and Wales
Egypt
Esthonia
Finland
France
Germany
Gold Coast
Greece
Grenada
Hong-Kong
Hungary
Iraq
Irish Free State
Italy
Kedah
Kenya
Latvia
Lithuania
Malay
Mauritius
Netherlands
Norway
Northern Rhodesia
Nyasaland
Palestine
Panama Canal Zone
Poland
Roumania
Saar Territory
Scotland
Kingdom of the Serbs, Croats and Slovenes
Sierra Leone
Singapore
South Africa
Southern Rhodesia
Spain
Straits Settlements
Sweden
Switzerland
Tanganyika
Tunis
Uganda
Zanzibar.

Special thanks are offered to the British Ministry of Health, which has kindly verified the data for all the British Colonies.

These tables are published in an *Annual Report on the Prevalence of Epidemic Diseases*, together with a general summary of the situation during the past year. The Report for 1924 is now in print.

Weekly mortality statistics are now received from 274 large cities in Europe and 114 in North America, in addition to a number of cities in other continents. Abstracts of these data are published currently in the *Monthly Epidemiological Reports*, and we propose giving it more space in the near future. The city statistics are available usually with very short delay in the case of weekly or monthly periods, and furnish therefore a current index of the general health situation and a valuable supplement to the epidemiological records, especially in regard to influenza.

(b) *Telegraphic Reports.*

The question of telegraphic reports has been fully dealt with in the Medical Director's Report. We have addressed a circular letter to the Sanitary Administrations of the following countries:

Albania
Algeria
Bulgaria
Egypt
France
Greece
Italy
Morocco
Palestine
Portugal
Roumania
Russia
Kingdom of the Serbs, Croats and Slovenes
Spain
Syria
Tangiers
Tunis
Turkey
Ukraine

(c) *Other Epidemiological Information.*

We are fortunate in receiving from several health services (Belgium, Bulgaria, Czechoslovakia Danzig, Finland, France, Greece, Hungary, Roumania, Russia, Kingdom of the Serbs, Croats and Slovenes, Sweden and Switzerland) general epidemiological information in addition to their regular returns, which is published from time to time in the summary of the *Monthly Epidemiological* or Annual Reports. Special mention may be made of a clinical and epidemiological description of the serious epidemic of a disease of the central nervous system which occurred in Japan last autumn (R.E. 72).

(d) *Special Investigations and Surveys.*

Special epidemiological investigations have been carried out by Professors Seligmann and Roesle and Major Russell. The Committee will remember that Professor ERICH SELIGMANN,

Director of the Bacteriological Institute of the City Health Administration of Berlin, is engaged in a bacteriological and epidemiological investigation with the purpose of determining to what extent the cases notified as epidemic meningitis can be identified by the recovery of the meningococcus and incidentally to collect any new information of importance in regard to the epidemiology of cerebro-spinal meningitis. Two reports have been received, on the cases reported in Prussia during 1923, and in Berlin during 1923 and 1924; an additional report on epidemic meningitis in Prussia during 1924 is in preparation. A detailed questionnaire has been filled in for each case and the results tabulated. The meningococcus has been found in only 13 per cent of the spinal fluids examined for this purpose in Prussia in 1923. It was found that 47 of the 59 cases reported in Berlin during 1923 and 51 of the 60 reported during 1924 were actually meningococcal meningitis. The details of the investigation have been published in the *Monthly Epidemiological Reports* (Nos. 71 and 77).

A study of the epidemiology of scarlet fever has been undertaken by Professor E. Roesle, of the Reichsgesundheitsamt, who has collected mortality statistics for this disease for all countries for which reliable information exists and for as many years as possible. Professor Roesle is engaged in analysing these data with special regard to the periodicity of the disease. It is hoped that this study will be finished in July next.

A memorandum on the Epidemiology of Cholera has been prepared by Major A. J. H. Russell, I.M.S., Director of Public Health, Madras Presidency. He reviews the literature on the history of cholera, its endemic centres, the pandemics and its usual routes of dissemination to the West. Special attention has been given to the seasonal prevalence of cholera and the influence of climatic conditions, and the correlation between the rainfall and the incidence of cholera in the Madras Presidency has been established. A delay of about two months was found between the rains and the cholera epidemics, and a significant positive correlation between the two was demonstrated, varying in the different districts of the Presidency from eight to twelve times the probable error. No correlation was found between cholera incidence and the humidity of the air. Cholera cases reported in the Presidency showed a definite cycle of 72 months during the period 1902-1921. The importance of pilgrimages and religious festivals in the dissemination of cholera is pointed out, and famine or under-nourishment, with the resulting lowered vitality of the population, is observed to produce suitable conditions for epidemic outbreaks.

A special report on tuberculosis statistics, with reference to their international comparability, has been prepared by Dr. S. Rosenfeld, Chief of the Statistical Bureau of the Volksgesundheitsamt of Austria, and will be published shortly. The influence of the statistical systems, and especially of the procedure in certification of causes of death, is shown for various countries. Safeguarding professional secrecy by certification is found to be of considerable influence in the case of deaths from tuberculosis, which will frequently not be returned as such where the certificate is not confidential. The changing nomenclatures and classifications of tuberculosis are discussed from the point of view of administration as well as of practical medicine. The existing enquiries into errors in diagnosis are reviewed and statistical publications of various countries compared. The study is valuable in revealing the numerous pitfalls which exist in a statistical study of tuberculosis.

## II. Improvement of Medical Statistics, especially of their International Comparability.

### (a) *International Comparability of Medical Statistics.*

The Health Committee recommended at its first session the appointment of four groups of experts to study various phases of the existing incomparability of vital statistics which had been described in preliminary memoranda prepared by the Service (Documents C.H. 165, 167 and 168). These four groups were appointed in April 1924, and the Chief of the Epidemiological Intelligence Service reported on the progress of their work to the third session of the Committee (Document C.H. 241, Annex 2). One of these groups, studying a uniform definition of still-birth, has now made definite recommendations, and its work is terminated; a report drawn up by two members of the group, studying the classification of joint causes of death, also contains recommendations for submission to the Health Committee.

*Uniform Definition of Dead-Birth (Still-Birth).*

The group of experts studying this problem consists of Dr. R. Dudfield, O.B.E., M.A., M.B., D.P.H. (Rapporteur), Dr. G. Hedrén, of the Karolinska Institutet at Stockholm, Dr. Eardley Holland, M.D., F.R.C.S., F.R.C.P., M. Huber, Director of the Statistique générale of France, and M. Marcel Ney, Director of the Swiss Bureau of Statistics.

Preliminary memoranda on the subject were prepared by all members of the group during 1924, and when the problem had been further discussed by correspondence and full light thrown upon the medical, legal, statistical and administrative aspects of the question, a meeting was convened in order to frame definite recommendations. This meeting was held in Geneva on March

23rd and 24th and was attended by all the members with the exception of Professor Hedrén, who was prevented from coming. A memorandum on the subject was also presented by Dr. T. H. C. Stevenson, of the Registrar-General's Office for England and Wales, who was invited by the group to participate in the meeting.

Unanimous agreement was reached regarding the definitions of live- and dead-births and rules laid down for the compilation of statistics. The most important definitions drafted were:

> "The birth is to be deemed complete at the instant when the whole of the body of the fœtus — head, trunk and limbs — is outside the body of the mother.
>
> "The birth is to be deemed a live-birth if, after birth (as defined above), the infant breathes.
>
> "The act of respiration is incontrovertible evidence of life, and its continued absence is to be taken as proof of fœtal death.
>
> "A dead-birth is the birth of a fœtus, after at least 28 weeks' pregnancy, in which pulmonary respiration does not occur; such a fœtus may die either: (*a*) before, (*b*) during or (*c*) after birth, but before it has breathed."

It is of great importance to carry these recommendations into effect as soon as possible in order to make possible the international comparison of statistics on: (*a*) live-births, (*b*) dead-births and (*c*) infant mortality. The decisions do not affect the other problems of comparability of medical statistics which have been or will be studied, and the solution arrived at has been agreed to by the experts who have studied the problem from all aspects. (The opinion of Professor Hedrén has been asked but not yet received.)

The Health Committee has therefore before it recommendations which may enable it to frame definite proposals for international action.

*Primary Tabulation of Joint Causes of Death.*

The group of experts studying this problem consists of Dr. T. H. C. Stevenson, C.B.E., of the Registrar-General's Office for England and Wales (Rapporteur); Dr. William H. Davis, Chief Statistician of Vital Statistics, Bureau of the Census of the United States; Dr. S. Rosenfeld, Chief of the Health Statistics Bureau of the Austrian Public Health Service, and Professor E. Roesle, of the Reichsgesundheitsamt.

After various memoranda prepared by the members had been discussed by correspondence, a report was prepared by Dr. Stevenson, as Rapporteur, showing the necessity for introducing a set of uniform medical questions on the death certificate before attempting to reach any detailed agreement as to primary tabulation of joint causes of death, and submitting a draft of the new death certificate proposed. A meeting of the group was called after this report had been distributed to the members.

Unfortunately, only Drs. Stevenson and Rosenfeld were able to attend this meeting, which took place in Geneva from March 12th to 14th. The following recommendations were made:

1. That a standard form of certificate of the cause of death should be recommended for general international use, adapted to elicit from the certifier the mutual relationships of the causes returned upon it.

2. That, apart from local variations in detail required to meet linguistic or other local circumstances, this form should be as follows:

| | | Cause of Death. | |
|---|---|---|---|
| | | *Principal Cause.* | *Independent contributory cause if important.* (Not causally related to principal.) |
| | | 1. Immediate cause..... | |
| Causes antecedent to above, in order of relationship. | due to | 2. ..... | |
| | due to | 3. ..... | |
| | due to | 4. ..... | |

*In moste cases it will suffice to stade the principal cause, reserving statement of contributory causes for instances where the deceased succumbed to a combination of diseases none of which would necessarily have been fatal by itself. In such cases the certifier's judgement alone can afford guidance as to the cause to be selected as principal,* i. e. *the cause chiefly contributing to the death and under which the death should be tabulated.*

*By the immédiate principal cause is meant the morbid condition actually causing deaht, and, by causes antecedent to it, any others of which it was the consequense. If more than one of these is entered, the order of relationship should be preserved,* e. g., *(1) cerebral hæmorrhage, (2) arteritis, (3) syphilis; or (1) broncho-pneumonia, (2) measles, etc.*

3. That the information provided by this form should be used to determine the selection of a single cause for tabulation from certificates recording more than one cause of death.

4. That the recommendation of the new form of certificate should be accompanied by a resolution by the Health Committee of the League of Nations, calling attention to the importance of death certification and to the necessity of an effort to secure its greater efficiency, by ventilation of the subject in the professional Press, its inclusion in the medical curriculum and in any other manner appropriate to the circumstances of each country.

5. That a resolution should be passed by the Health Committee of the League of Nations to the effect that the general adoption in all countries of centralised, as opposed to local, tabulation (under medical direction) of causes of death would be a powerful means of promoting efficiency and comparability.

6. That the Health Section should continue its work in the promotion of uniformity in tabulation of causes of death with the ultimate object of a general agreement regarding the detailed application of the principles above recommended.

The report has been sent to the absent members of the group for their comments. Dr. ROESLE, while agreeing to the general principles laid down therein, advocates a more detailed form for the medical questions on the death certificate, especially as regards death from accidents and suicide. It is hoped that Dr. DAVIS's comments will also be available shortly.

*Age and Sex Classification.*

The group of experts studying this question consists of Dr. A. ASCHIERI, Director-General of the Central Statistical Service of Italy; Mr. R. H. COATS, Dominion Statistician of Canada, and Dr. H. J. HANSEN, Chief of the Medico-Statistical Office of Denmark.

Memoranda have been received from all members of the group and discussed by correspondence. No final agreement has been reached, as yet, regarding the age groups to be recommended for the principal tabulation of causes of death, but general agreement exists on the following important points:

That it is desirable to request the date of birth as well as of death on death certificates;

That the age to be tabulated should be the age last birthday;

That the tabulation of causes of death by age should be made for each sex separately;

That the blank spaces in main tabulation could be reduced by drawing up separate tables showing causes of death peculiar to a restricted period of life or possessing special importance. (This may reconcile the conflicting arguments regarding expense, on the one hand, and, on the other, the desirability of giving the greatest possible number of details for scientific purposes.) Thus, separate tabulation is suggested for: (*a*) causes of infantile mortality; (*b*) causes of death peculiar to old age; (*c*) maternal mortality; (*d*) cancer; (*e*) tuberculosis, influenza and diseases of the respiratory system.

It is hoped that a full agreement will be reached shortly, but it is desirable that representatives of other statistical offices may have an opportunity of expressing their opinion before a final report is made, in view of the very wide and general purport of any recommendations in this field. It is hoped that the Health Section may have the benefit of a continuous consultation facilitating a general exchange of views.

*Standardisation of Death Rates.*

The group of experts which has studied this question with special reference to a Standard Million of Population, to be adopted internationally for this purpose, consists of Dr. J. BROWNLEE, Chief Statistician of the National Institute of Medical Research, London; Professor A. NICEFORO, Professor of Statistics at Naples University, Professor E. WILSON, of Harvard University, U.S.A.; and Professor E. WURZBURGER, Chief of the Central Statistical Bureau of Saxony.

Memoranda have been prepared by all members, but the discussion which ensued revealed the difficulty of reaching an agreement on the solution of the numerous technical considerations involved.

The subject studied by this group differs from the other three in that it has no relation to the fundamental value of the data themselves nor to the form in which they are tabulated and presented. The standardised death rate is not a substitute for the crude actual death rates but only a convenient form by which the influence of the age constitution of a population may be eliminated. Several members of the group have pointed out that the standardised rate suffers from the same defect as the crude rate, *i.e.*, that it may convey the impression of simplicity in effecting comparisons, while the fact is that mortality is a complex of many factors.

The problem has been narrowed down to the following essential points:

(*a*) The selection of a population norm (compound or otherwise) as an international standard. No agreement has been reached, as yet, on this point; various proposals have been made, such as a compound of all countries having reliable vital statistics, or a stationary

population, or a life-table population. It would appear that the same population norm may not be suitable for all purposes.

(*b*) The selection of age and sex groups for standardisation purposes. The following grouping has been proposed for each sex: under 5 years, 5-14, 15-39, 40-59, 60 years and over. This grouping may not suffice, however, for causes of death peculiar to infancy or old age.

(*c*) Recommendations as to the cases in which standardisation is useful.

Professor Wilson points out very rightly that the proper use of death rates is largely an educational problem, and no "fool-proof" solution can be found. As the matter is less urgent than the other three questions, which involve the value of the data themselves for comparative purposes, further time might be allowed for this study in the hope of reaching practical recommendations.

### (b) *Medico-Statistical Interchanges.*

The *Second Collective Study of Medical Statisticians* took place from October 27th to November 22nd, 1924. Officials from the following countries participated: Bulgaria, Cuba, Czechoslovakia, Esthonia, Hungary, Roumania, Russia, the Kingdom of the Serbs, Croats and Slovenes and the Ukraine.

The principal topic of the study was the notification of epidemic diseases. The interchange commenced with a two-week discussion in Geneva under the chairmanship of Dr. EICHEL.

Each of the participants described the systems and peculiarities in the notification of diseases in his own country, and a general discussion followed, opened by the Chairman and various members of the Health Section, on the different aspects of the problem. The elements of notification procedure were discussed from the legal standpoint as well as from the point of view of controlling the diseases.

Methods of co-operation between local and central offices were next considered from the standpoint of statistical requirements and of administration. Special attention was devoted to the notification of certain diseases such as tuberculosis (to which the Chairman contributed an important statement), venereal diseases, puerperal sepsis, diphtheria.

One of the results of these discussions worthy of mention is that collaboration between the Health Section and the services concerned has since been much strengthened, and much valuable information, especially in regard to special descriptions of the epidemic situation, has been received. The health administrations of Bulgaria, Czechoslovakia, Roumania and the Kingdom of the Serbs, Croats and Slovenes have already intimated their desire to make official recommendations to the Health Committee on certain of the points brought out in the discussions.

The two weeks which followed were spent by the participants in a study tour through Switzerland, France and the Netherlands, where the various statistical offices and public health services were visited.

They were received in Berne by Dr. CARRIÈRE, Director of the Federal Public Health Service, and by Dr. NEY, Director of the Federal Statistical Office, who explained the systems and procedures for notification of epidemic diseases in Switzerland.

In Paris they were received by Dr. THIERRY, the Inspector-General of Technical Health Services of the City of Paris, by M. HUBER, the Director of General Statistics of France, and by M. LAMBERT, Chief of the Municipal Statistics of Paris, each of whom addressed the participants on the work of his service. Two visits were also made to the Prefecture of Police, where the methods of notification adopted in Paris were described.

The participants next visited The Hague, where they were received by Dr. JITTA, President of the Dutch Health Council, and by Drs. METHORST, TERBURGH and QUANJER, who each delivered statements on methods employed in the Netherlands. The Hotel de Ville and the Cleansing and Disinfection Service were inspected, followed by a day's examination of the medical services, quarantine system, etc., of the City of Amsterdam.

### (c) *Handbooks of Vital Statistical Services.*

The first two handbooks of the series prepared by Dr. Major GREENWOOD and Major P. G. EDGE have been published in both French and English on the statistical systems of the Netherlands and Belgium. The manuscript of two others (England and Wales and Spain) have been received.

The need for a ready and reliable source of detailed information on the official vital statistics of various countries has long been felt. These are the first efforts to produce a description of the systems of medical statistics in all their aspects for international reference, and the books will undoubtedly be found useful by students of statistics as well as by statistical administrations.

K. STOUMAN.

**Appendix 5.**

C.H. 289.

# ADDITIONAL NOTE ON THE ENQUIRY RELATING TO THE PRACTICE ADOPTED IN VARIOUS COUNTRIES FOR SEROLOGICAL TESTS FOR SYPHILIS.

[*Translation.*]

In order to give effect to a resolution adopted by the Health Committee at its first session, the Medical Director, in April 1924, sent a letter to the various national health administrations, drawing their attention to Conclusion III (see Document C.H. 148, page 70) of the Technical Laboratory Conference which met at Copenhagen in November 1923. This letter emphasised the necessity of centralising blood tests for syphilis in laboratories provided with satisfactory technical equipment, and it urged the importance of these tests being made free of charge. The national health authorities were also requested to state their views as to whether it would be possible to put the above proposals into practice in their country at the present time.

At the last session of the Health Committee, the replies from 19 health authorities were summarised and embodied in a preliminary note (Document C.H. 223). The purpose of the present memorandum is to give the substance of the replies which have since been received from Great Britain, the Irish Free State, Czechoslovakia, Japan and Belgium, and certain information regarding Russia which has been supplied by Professor Tarassevitch.

## Great Britain.

On October 1st, 1924, the British Minister of Health sent a circular (No. 528), drawn up by Sir George Newman, to the serologists in charge of the different laboratories carrying out syphilis tests. This document explained the system of notation recommended by the Copenhagen Conference, and went on to emphasise the considerable difficulties which had been experienced in interpreting blood tests owing to the different methods of notation employed in the various laboratories; it also informed the serologists that the results of tests carried out in conformity with the Order of 1916 in respect of venereal diseases could henceforward be expressed in accordance with the schedule adopted at the Copenhagen Conference.

On November 10th, 1924, a further circular (No. 528*a*) was sent to the same serologists informing them that the great majority of the laboratories had already adopted the system of notation recommended, and that the remainder had declared their willingness to adopt this system in future. The circular then discusses the question whether it would be desirable to adopt a more detailed system of grading the results of serological tests; a negative conclusion was reached because sufficiently accurate details cannot be furnished by certain of the methods employed; but it recommends that the results should in certain cases be interpreted in the light of an appended full statement of the special points observed in the course of the tests.

It was originally proposed to express the results of the serological test by means of figures in accordance with the system of notation employed for the Sigma test; but as uniformity in as many countries as possible is the main consideration, it would seem better for the moment to give the preference to the method of notation which has been proposed.

## Irish Free State.

The Ministry of the Interior and of Health is responsible for a periodical inspection of the laboratories which carry out free blood tests for syphilis, *viz.*, the Royal College of Surgeons, Trinity College, and University College, Dublin.

The system of notation recommended by the Copenhagen Conference was uniformly adopted as from February 1st, 1925, by the above-mentioned laboratories and by all the other dispensaries.

## Czechoslovakia.

The Ministry of Public Health and Physical Education has informed us that it hails with satisfaction the initiative taken by the Health Committee in regard to the regulation of the sero-diagnosis of syphilis, and that it is in complete agreement with the guiding principles proposed by this Committee.

The conditions under which serological tests are at present carried out in Czechoslovakia are already for the most part in conformity with the recommendations of the Copenhagen Conference. Out of 38 laboratories which carry out the sero-diagnosis of syphilis, 26 are attached to Government, provincial, or municipal institutions (University Institutes, Hospitals), and are directed by highly qualified specialists. An effort is being made to provide all hospitals of more than 300 beds with a laboratory for sero-diagnosis.

As regards the 12 private laboratories, it should be observed that permission to establish such laboratories is granted by the State only if the serologist in charge possesses the necessary

knowledge. Close collaboration is established with the hospital services, 16 laboratories being directly attached to hospitals or clinics, while the remainder check their results by data furnished by the clinics.

Serological tests are carried out free of charge at all the Government and provincial laboratories when the patient is attended at a State institution (hospital, lunatic asylum, dispensary) or when the test is asked for by a public official (medical officer of the district or department or of the police).

The Ministry of Public Health will very shortly consider the possibility of further extending the institution of free blood tests. Moreover, the whole question of the sero-diagnosis of syphilis will be submitted to more detailed regulations as soon as the future National Institute of Health has started working. The following provisions are contemplated:

(*a*) At all places where the sero-diagnosis of syphilis is practised, a standardised method will be made compulsory and the results will be recorded by a uniform method of notation. In respect of these two points of method and notation, account will be taken of the recommendations of the Health Committee.

(*b*) The National Institute of Health will furnish the standardised re-agents necessary in employing the regulation method or other methods the use of which may become general.

## Japan.

Although the health authorities in Japan are not opposed in theory to free tests and to the technical guarantees which must be required of the laboratories, they consider that, in the present circumstances, it would be difficult to apply the principles laid down at the Copenhagen Conference. It should be pointed out, however, that a number of private organisations undertake blood tests free of charge; the health authorities recognise the value of institutions of this nature.

## Belgium.

The suggestions of the Technical Conference at Copenhagen have for the most part already been put into practice in Belgium. Serological tests for syphilis are centralised in a small number of laboratories belonging to the State, the provinces or the Universities.

It is true that this centralisation is not absolute, for there is no law in Belgium to prevent the establishment of private laboratories. These, however, are few in number and the number of tests carried out in them is extremely small.

Blood tests for syphilis are therefore entrusted in the vast majority of cases to experienced professional bacteriologists, who are in possession of the best equipment and are appointed by the State, the provinces and the Universities.

This is especially the case as regards patients treated at State expense. The latter refuses to undertake any share in expenses which the approved organisations for the treatment of syphilis might have incurred in having serological tests carried out in laboratories other than those selected by the Department of Health and in which serum tests are carried out free of charge.

There exist, therefore, centralised free tests and technical guarantees as recommended by the Conference of Copenhagen. These guarantees are further strengthened by the fact that the Supreme Board of Health had recommended to all the laboratories to adopt one and the same antigen, namely, that prepared by the Brabant Pasteur Institute, and also to use the technique of this establishment.

In order to comply as far as possible with the recommendations made by the Conference at Copenhagen, the Director of the Central Bacteriological Laboratory of the Department of Health has adopted the following measures, which came into force on January 1st, 1925.

(*a*) The tests employed will be the complement deviation test and the Sigma reaction;

(*b*) The results of the tests will be expressed by means of the notation recommended at the Copenhagen Conference;

(*c*) The laboratory will work in close collaboration with the clinical services.

The Pasteur Institute at Brussels has also adopted the notation approved by the Copenhagen Conference, and this notation appears in the new schedules which have come into use since the beginning of 1925.

## Russia.

Professor Tarassevitch informs us that a meeting of Russian serologists has been held at which the recommendations of the Copenhagen Conference were discussed. Agreement was reached and the resolutions of this Conference will be submitted to the Congress of Russian Bacteriologists, which is to meet at the beginning of May.

**Appendix 6.**

C.H. 276

# PROGRESS REPORT ON THE STANDARDISATION OF CERTAIN BIOLOGICAL PRODUCTS

By H. H. Dale, London.

During the past year, substantial progress has been made with regard to several items of the programme of investigation framed by the International Conference on Biological Standards, which met at Edinburgh in July, 1923.

1. *Digitalis.* — The three samples of dry digitalis leaves obtained by Professor Magnus, of Utrecht, one of which was put forward as of suitable strength to serve as an international standard of reference, have been examined by 16 investigators in eight different countries. The results have been collected and reviewed. The comparison revealed certain obvious discrepancies between the results of different workers, using apparently identical methods, in different centres. The causes of these discrepancies are now the subject of further investigation. At the same time, a serious effort is being made to determine whether such broad differences of activity, between the different samples, as are shown in the results of all the different laboratory investigators, by whatever method, correspond to obvious differences in the therapeutic properties of the preparations, as determined by direct observation on human patients.

The investigation is a difficult one, and will almost of necessity be prolonged, but it is to be hoped that it will have, as a final result, a more definite decision than has hitherto been possible as to the value of biological methods for the standardisation of digitalis and the allied remedies.

2. *Insulin.* — The preparation of the proposed international standard sample in the form of a stable dry powder was completed in May 1924, at the National Institute for Medical Research, Hampstead. A quantity of approximately 500,000 units of Insulin in this form is at present held by this Institute, pending a final decision, by the Toronto Insulin Committee, of the exact value of the arbitrary unit in terms of this standard. The work has presented several unexpected difficulties, but its completion may be looked for in the immediate future. It will then be possible to issue samples of standard, with an exact indication of its unit value, to the responsible authorities in all countries concerned.

3. *Pituitary Extract.* — The sample of dried and purified substance of the pituitary posterior obe, furnished by the Hygienic Laboratory, Washington, has been submitted to, and examined by, ten investigators in seven different countries. The reports have been collected, and have shown complete unanimity in favour of this preparation as a suitable standard of reference for the activity of extracts of pituitary posterior lobe. Practical unanimity has also been attained as to the nature of the primary biological test to be applied in making the comparison, all the investigators being agreed that the test on the isolated muscle of the uterus should be used for the essential quantitative comparison. The desirability, and nature, of the supplementary test, based on one of the other activities of the extract, is still under discussion.

4. *Thyroid Gland Substance.* — An important advance in the standardisation of this material has recently been made by the investigation carried out on behalf of the International Conference by Professor A. Straub, of Munich. Professor Straub has introduced a modification of the acetonitrile method proposed by Professor Reid Hunt, of Boston, which should have the effect of making the test more accurately quantitative. He has, further, provided important evidence of the therapeutic significance of this measurement, by showing that the activity of different thyroid preparations, as measured by the acetonitrile test, is directly proportional to their activity on the metabolism of mice, as measured by the respiratory exchange and the loss of body weight.

It is hoped that the experience of other investigators, with the new form of test, may now be obtained. If its practicability should be established, it seems likely that a satisfactory biological criterion for the activity of this important preparation will be within reach.

5. *Salvarsan, etc.* — Details have now been collected with regard to the tests applied in the principal countries, to guarantee the freedom from abnormal toxicity, and the uniform therapeutic potency of the substances belonging to this important group of organic arsenical remedies. It is hoped that individual consultations, which have been arranged to take place in the near future, will make it possible to formulate definite proposals for an internationally applicable series of tests, and for a series of standard reference samples for rendering such tests internationally uniform.

6. *Ergot.* — Such progress as has yet been made with regard to the methods of standardising this remedy suggests that the most rational solution of the problem is likely to be found in the shape of an agreed chemical method of assay, rather than of a biological test of any kind. Possibilities are still under investigation.

February 28th, 1925.

**Appendix 7.**

C. H. 286

# THE TEACHING OF HYGIENE IN THE NETHERLANDS

*Report by Dr. Josephus Jitta.*

The general teaching of medicine, including hygiene, is governed by the Law of 1876, as finally amended in 1922.

There are four Universities in Holland, namely:

(1) Leyden.
(2) Utrecht.
(3) Groningen.
(4) Amsterdam.

The first three are maintained by the State and are called State Universities, while the one at Amsterdam is a municipal University, all the costs of which (with the exception of some insignificant subsidies) are borne by the town. The diplomas of all the Universities have the same value.

Students wishing to be admitted to the regular study of medicine must be in possession of a diploma certifying that they have passed an examination on conclusion of their studies in a Lycée comprising six classes (including instruction in Greek and Latin), or a State examination of the same value, or an examination after having attended the five classes of a secondary school, in which preference is given to the study of exact science.

There are still so-called State examinations in medicine, but, in practice, the academical examinations are taken. There are two principal examinations, *i.e.*, that of "candidate" in medicine and that of doctor; the latter entitles the student to submit a thesis, after which he receives the title of Doctor of Medicine. This title does not, however, entitle him to practise medicine; this right is only acquired after further examinations have been passed before a Commission, the members of which are officially appointed each year.

The examination for the degree of Doctor also includes hygiene. The courses have an average duration of three years, and the student must also attend practical courses in the laboratory. The general principles are the same in the four Universities, but the instruction differs slightly in each, according to the individual methods of the professors.

At Leyden and Amsterdam, in addition to the Chair in Hygiene, there is also a Chair in Tropical Hygiene. The Chair at Leyden is dependent on a private Association of Tropical Medicine, with its seat at Leyden and Rotterdam. The Chair at Amsterdam is maintained by the Section for Tropical Hygiene of the Colonial Institute.

In order to obtain exact information regarding the study of hygiene in the various Universities, I have made enquiries of the professors themselves, and my report is based on information received from Professor Eijkman, of Utrecht, and Professor Van Loghem, of Amsterdam, and is arranged in the order indicated in Professor Léon Bernard's report to the Health Committee.

## 1. Programme of Instruction.

*Utrecht.* — Hygiene including microbiology.

*Amsterdam.* — Microbiology, immunology, general and special epidemiology, hygiene (drinking water, dwellings, drains, etc., disinfection, nutrition), the control of diseases, precautionary social measures, medical legislation concerning hygiene, social and industrial hygiene.

### 1 (*a*) *Duration.*

*Utrecht.* — Two years for the Doctor's examination, in addition to one year of general bacteriology before the candidate's examination.

*Amsterdam.* — One term during the first year of clinical studies and two terms during the second year.

### 1 (*b*) *Principles involved.*

*Utrecht.* — Course in hygiene of two hours per week; in practical microbiology, two hours twice a week for ten weeks.

*Amsterdam.* — Courses and demonstrations, practical work and visits to various institutions which are of interest from the point of view of public health.

## 2. Organisation of Chairs in Hygiene.

Instruction in hygiene has been compulsory since 1876; the first laboratories also date from this period.

The Chair at Amsterdam has, however, been in existence since 1867.

The present laboratories are almost new buildings and are extensive and well equipped. The laboratory at Amsterdam was constructed five years ago by the municipal authorities, with the help of a subsidy from the Colonial Institute, which has its own rooms in the building.

### 2 (*a*) *Number of Chairs in Hygiene.*

There is one Chair at each University (in addition to the two Chairs in Tropical Medicine at Leyden and Amsterdam, and the Chairs in Social Hygiene and Serology at Utrecht).

With regard to the higher technical academy, see below.

### 2 (*b*) *Bacteriology, etc.*

*Utrecht.* — There is an extraordinary professor for serology and one for social and industria hygiene. The professor of zoology teaches parasitology.

*Amsterdam.* — An assistant professor gives courses in microbiology.

## 3. Training of Professors in Hygiene.

There is no training for this purpose. The present professors are recruited from among those who have worked in the laboratories or have distinguished themselves by scientific work or by special studies.

## 4. Endowment of Chairs.

*Utrecht.* — The State grants an annual subsidy of 5,000 florins (for instruments, material, etc.) to the laboratory in addition to paying for the necessary staff.

*Amsterdam.* — The State supplies a certain number of certificated assistants in addition to the necessary staff. The total budget of the laboratory is 55,600 florins.

## 5. University Examination and Endowments.

### *Examination for the degree of Doctor.*

According to present legislation each faculty has had for the last two years the right to create special doctors' degrees, including one in which social hygiene is the principal subject.

Reference has been made to only two universities, but, as stated above, the general organisation is on the same lines in the other two.

## Tropical Hygiene.

*Amsterdam.* — For some years students wishing to prepare for a career in the Indies have been enabled by the Colonial Institute to perfect themselves in the study of tropical diseases. The Institute of Tropical Hygiene is at the Laboratory of Hygiene of the University; it includes:

A professor of hygiene, Director of the Institute;
A professor of tropical pathology; and
A professor of zoology,

all three of whom are also attached to the University, the last as parasitologist.

In addition, instruction is given in immunology and chemistry as applied to hygiene. The total budget amounts to 48,250 florins.

Instruction is given daily and throughout the whole day in bacteriology, immunology, pathology, tropical hygiene, zoology, practical work and legal medicine. There are also surgical demonstrations in various hospitals, practical courses, scientific work and excursions.

The duration of the course is six months.

*Leyden.* — The Institute gives a series of courses. Some deal with social questions and provide an opportunity for practical work; they last several months.

Others are intended particularly for persons going out to the Indies and deal with questions of medicine and hygiene relating to the colonies.

Finally, others are intended for students belonging to another faculty who propose to settle in the Indies.

Several professors, lecturers and medical specialists are attached to the Institute. The laboratory is at the disposal of persons completing their studies at the Institute.

The Institute possesses a small hospital for tropical diseases.

## Instruction for Health Experts.

The organisation of the higher polytechnic school of Delft (technical academy), the students of which are civil engineers, electro-technicians, mining and industrial engineers, technical chemists, etc., is described in the law on higher education mentioned above.

The curriculum includes technical hygiene.

Before being admitted to the engineering examinations, the students must be in possession of one of the certificates mentioned at the commencement of this memorandum.

Instruction in social and industrial hygiene is given by a professor with the degree of doctor of medicine. This instruction is, however, optional; that is to say, there is no examination in hygiene. The students are at liberty to follow the courses or not, and there is therefore no systematic instruction. The courses are intended for civil engineers and chemists. The engineer's diploma may mention the fact that courses have been taken in hygiene.

The theoretic course is held twice weekly, and deals with the atmosphere, the soil, drinking-water, dwellings, communal or industrial hygiene, industrial diseases, and has for some time included technical psychology. Students have an opportunity of working in the laboratory under competent guidance. Finally, the professor organises visits to factories, works, etc.

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With the consent of the Government and with the assistance of the various professors, the Board of Health of the Netherlands is at present engaged in organising special supplementary instruction for medical men. This instruction will include the main branches of social hygiene. Examinations with diplomas are to be introduced to qualify persons seeking positions as State, provincial or municipal health officials, inspectors of public health, heads of health departments, industrial medical inspectors, school physicians, etc.

The duration of the course will probably be fixed at six months.

*(Signed)* J. Jitta.

March 6th, 1925.

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**Appendix 8.**

C.H. 277.

## REPORT ON THE TEACHING OF HYGIENE AND SOCIAL MEDICINE AT GERMAN UNIVERSITIES, TECHNICAL HIGH SCHOOLS AND ACADEMIES FOR SOCIAL HYGIENE

By Professor B. Nocht.

### I

Medical education in Germany extends over a total period of six years, which are divided into three stages, namely, (1) four pre-clinical terms; (2) six clinical terms; and (3) a year of practical medicine, which the student has to spend as a resident medical officer in a hospital. Students attend the lectures and courses on hygiene in the second of the above periods, as a rule towards its latter end. There are no fixed programmes of study in Germany, but all the universities have prepared model schemes which are issued for guidance to the students and which, speaking generally, the students prefer to adopt. The State Medical Examination is held at the end of the second stage (the clinical terms). Students cannot commence the year of practical medicine until they have passed the State examination. The doctor's diploma is not given till after completion of the year's course of practical medicine.

To obtain the degree of Doctor of Medicine, which is awarded by the Faculty, independently of the State diploma, the candidate has to submit a written thesis and pass an oral examination. Subjects connected with hygiene may of course be selected for the thesis, and questions on hygiene may be put in the oral examinations.

A person desirous of sitting for the State examination must, among other qualifications, be able to show that, while studying at the University, he attended a course of lectures on hygiene, besides taking a practical course in bacteriology, and a course in vaccination.

In this connection, the following courses of lectures are given in *all* German universities:

(1) A course of lectures on hygiene for medical students;
(2) A practical course in bacteriology for medical students;
(3) A vaccination course for medical students.

The lectures on hygiene are in all cases given by the regular lecturer on hygiene of the University in question. The course consists of two terms, with two or three lessons per week, or of one term with five lessons per week. In the former case, subjects such as eugenics, air, climate, clothing, housing, ventilation, heating, lighting, barracks, factories and so on, are treated during one term; and soil, water, waste products, etiology and prophylaxis of infectious diseases in the other term; or general hygiene, sport, physical training, and infectious diseases are taught in one term; and

water-supply, the disposal of waste products, food, air, climate, clothing, soil, housing, ventilation, industrial and social hygiene in the other term; or again, soil, water, the disposal of waste products, climate, and clothing, in the summer; and housing, food, schools, industrial hygiene and infectious diseases in the winter. The lecturer is allowed complete latitude as regards the subdivision of his subject, the method of handling it, and the time devoted to the different sub-heads of the lectures.

Social hygiene is taught at most universities by the regular lecturer as part of the above curriculum. Most of the German lecturers on hygiene hold that social hygiene cannot advantageously be treated apart from the whole question of health as taught to the students, and that it is better to include it in the general course of lectures on hygiene, and to discuss it together with the various headings of that subject. Only at Berlin is there a regular lecturer on social hygiene; at Munich, Erlangen, Heidelberg, Jena and a few other universities extraordinary lecturers or unsalaried lecturers (at Jena it is the lecturer on forensic medicine) are specially charged with the teaching of social hygiene.

The bacteriological courses occupy two to four hours per week. They are delivered by the regular lecturer and his assistants. At some universities, bacteriological courses are given for chemists, pharmacists and dentists. In the courses for medical students special attention is given to the practical handling of pathogenic organisms, whilst in other courses such matters as fermentation, methods of sterilisation, and so on, are dealt with.

Instruction on vaccination is given at some universities by the regular lecturer, who has one or more vaccination districts assigned to him for the purpose; at other universities, the instruction is given by the Government vaccinator and the Directors of Government Vaccine Institutes, who, in many universities, combine these duties with those of extraordinary or unsalaried lecturers. Candidates for the medical degree must, in addition to the above vaccination course, have attended two public vaccination days and also two public re-vaccination days.

In addition to these compulsory courses, all universities provide further lectures and courses for medical students, *e.g.*, on industrial hygiene, medical care of school-children, immunology, etc. Nearly all the universities have a course on public health laboratory methods, which is attended by most of the students. Many universities have instituted conferences *(Kolloquien)* lasting several hours, and nearly all of them organise visits to sanitary installations and industrial establishments. These additional courses are given, in some cases, by the regular lecturers, and in other cases by their assistants (extraordinary lecturers and unsalaried lecturers). Attendance is not compulsory.

Many, though not all, universities have also introduced general health courses for other than medical students and instruction in the care of health, eugenics, the prevention of veneral diseases, alcoholism, etc Many universities have special lectures for young teachers, political economists, etc.

All universities possess a public health institute, the director of which is also the regular lecturer on public health at the university. An institute of this kind is, as a rule, the bacteriological research laboratory of the university town, or of some larger area, and in many cases it is also the food analysis office. The equipment and material of these institutes may be freely used for the lectures on hygiene. All the public health institutes are more or less amply provided with museums, models, microscopic slides, collections of photographic slides, magic lanterns, statistical tables, etc., etc. In Hamburg there is, in addition, a lecturer on tropical medicine and hygiene, and an Institute for Tropical Diseases and Tropical Hygiene. The director of this Institute is at the same time the regular lecturer on this subject.

In addition to the regular lectures on hygiene, all the universities maintain several "extraordinary lecturers" *(Extraordinarien)* and unsalaried lecturers, who assist on the special hygienic and bacteriological courses (see above) held for medical students, dentists, chemists, students of political economy, teachers, etc.

The regular lecturers on hygiene are recommended by the Faculties and appointed by the Governments. They are recruited, as a rule, from the "extraordinary" lecturers and unsalaried lecturers on hygiene, who are usually, at the same time, assistants in the public health institutes. These junior appointments are, in their turn, recruited from physicians who desire to take up an academic career and who have shown an interest in public health by scientific research work and by publishing papers on scientific subjects. No special competitive examinations are required from these candidates for an academic career. The candidate for a lectureship must attain a certain status *(sich habilitieren)*. In order to qualify for this status, he must have served from two to four years as an assistant lecturer, have published a certain amount of original scientific work, and have submitted a special thesis which must be up to the standard of the Faculty. He must next undergo an oral examination and give a trial lecture; and if he comes satisfactorily through all these tests he can be engaged as a lecturer.

The examination of medical students in hygiene forms part of the State examination in medicine. No previous examination in hygiene is required. The State examination in hygiene is oral, and the candidate has to show that he has acquired such a knowledge of hygiene as "is necessary for a practising physician", and, in particular, that he is familiar with the methods of bacteriological research and with the principles and technique of vaccination, besides possessing the necessary knowledge as to the preparation and preservation of vaccine. In the examination in hygiene, special attention is paid to social hygiene, a subject of great practical importance.

## II

The Health Officers of the German Reich and its States, and the health officers of the larger towns, must possess a medical diploma and have undergone a special preparatory training, and they must further pass a special examination. Practising physicians are, as a rule, only allowed to take this examination two to four years after receiving their general diploma and after having practised medicine for several years. In the case of part-time medical officer of health (a proportion of school doctors, police doctors, prison doctors, are of this nature), this examination is not always insisted on; but, as a rule, when selections are being made for such appointments, preference is given to those who have passed the examination. The conditions for admission to the examination and the standard to be reached are substantially the same in the different German States, and only vary in unimportant details. Candidates must have undergone special preparatory training in forensic medicine, psychiatrics and public health. In practice, the official duties of the above-named medical officers of health are not usually confined to the care of health; they are also, as a rule, police-court doctors and medical advisers to the State authorities for various purposes (*e.g.*, deciding on the fitness for duty of officials, making out official medical certificates, etc.). Medical officers whose duties are limited to the care of health are only to be found in the larger towns.

The special preparatory training in hygiene required of a candidate for examination is a three-month course of hygiene at a University Institute of Hygiene or at some institute recognised as equivalent. In Prussia it is, further, necessary that the candidate should have successfully completed a course of instruction in social hygiene at the Academy of Social Hygiene at Breslau, Charlottenburg or Düsseldorf. The examination is both written and oral. The written examination includes the writing of a thesis on some subject connected with public health or social hygiene, the subject being chosen by the Board of Examiners. This work has to be completed within six months, with the judicious use of literature on the subject, and must represent an original scientific contribution to the subject in clear, concise and comprehensive form. The work is judged by a special Board of Examiners. If this monograph on public health or social hygiene and his work on forensic medicine are considered satisfactory, the candidate is admitted to an oral test. This oral examination on public health, social hygiene, medical administration, etc., is held in the presence of two examiners. Under the eyes of the examiners, the candidate has to undertake some practical public health investigation or procedure and has to show, by oral examination, that he is thoroughly well acquainted with the subject of public health, its organisation, legislation and practical work and is familiar with medical statistical methods. This examination is not considered easy, and a candidate often fails even over the written work. He may enter for re-examination after a period fixed by the Examining Board. The oral test is also difficult.

Some of the subjects dealt with in the examination during the last few years by the Examining Board at Hamburg are as follows:

An anti-venereal campaign in a large seaport town;

Droplet infection in infectious diseases; its importance and prevention;

Industrial blood poisoning;

Ventilation of public buildings, schools, hospitals, and the results obtained;

Description and criticism of the present methods of combating *tuberculosis* in Germany, taking into account the most recent legislation;

The organisation and development of the School Medical Service;

Bathing hygiene;

The imports of measures against ectoparasites;

Present prevalence of plague and possibility of recrudescence;

Sea climate and school-children;

The supply of drinking-water in the North German Marches;

Modern water supply of large towns;

Present situation as regards disinfection in the case of notifiable infectious diseases;

The importance of anthrax and the measures necessary to diminish the danger of infection in commerce and industry;

Survey and criticism of present food laws and food supervision in Germany.

Continuation courses of several weeks' duration are held in the Public Health Institutes from time to time for the benefit of officiating Medical Officers of Health, both State and communal. For attendance at these courses, the officiating medical officers receive either free travelling facilities and board and lodging, or allowances. The courses deal partly with the prevention of infectious diseases, partly with school hygiene, social hygiene, antituberculosis measures, etc.

III.

The teaching staff of the technical high schools in Germany now includes in every case lecturers on hygiene, who are specially charged with the health instruction of engineers, architects, etc. These lecturers are for the most part professors who are recruited from the ranks of medical officers specialised in hygiene. The instruction covers general public health, building sanitation, industrial hygiene, etc. Only a few technical high schools, such as Dresden (large) and Munich (small), have special Institutes of Hygiene. Technical high school students are only examined in hygiene at Munich, where Pettenkŏfer established the system, but it is proposed to create fully-paid regular lectureships in hygiene at all technical high schools as the financial conditions of Germany improve.

IV.

In addition to the provision for the teaching of public health and social hygiene in the Universities and technical high schools, academic instruction in hygiene is given in Germany in three Academies for Social Hygiene at an East German Academy at Breslau, a West German Academy at Düsseldorf, and the Academy for Social Hygiene at Charlottenburg. In these places three-monthly courses are held during each term. Any doctor is permitted to take the course. Candidates for admission to the examination for the post of Kreis doctor in Prussia must be able to show that they have successfully completed one of these courses. In the choice of communal (and municipal) medical officers of health consideration is given as far as possible only to those doctors who have acquired the necessary knowledge by taking part in a course of social hygiene. Teaching is on training college lines, that is to say, it does not consist only of a course of lectures, but detailed demonstrations are given, as well as oral tests and exercises, and those taking the course are attached for a period of time for practical work to specially qualified health officers engaged in social hygiene in a municipal or country district.

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**Appendix 9.**

C.H. 293.

## PUBLICATIONS OF THE HEALTH ORGANISATION.

(Abbreviations: E. = English; F. = French; G. = German. O.S. = Official foolscap size.)
(The publications marked with an asterisk are not on sale.)

### I. Publications issued in 1924.

(*a*) Periodical Publications of the Health Section.

1. *Monthly Epidemiological Intelligence Reports*, Nos. 62 to 73, bilingual, 533 pages.
2. Statistics of Notifiable Diseases for 27 European countries, 15 African countries, 14 American countries, 12 Asiatic countries and for Australasia for the year 1923. *(Epidemiological Intelligence*, No. 8), F. and E., O.S., 107 pages each.

(*b*) Organisation and Work of the Health Services in Various Countries.

3. Public Health Services in Germany, by Dr. Gottfried Frey (C. 820. M. 309. 1923. III). F. and E. in 4to, 69 and 60 pages.
4. Public Health Services in Austria, by Regierungsrat Dr. Hermann Schroetter (C. 824. M. 314. 1923). F. and E. in 4to, 91 and 82 pages.
5. Organisation of the Public Health Services in the Kingdom of the Netherlands, by Dr. N. M. Josephus Jitta (C.H. 209). F. and E., in 4to, 37 pages each.

(*c*) Medical Interchange Monographs.

6. L'organisation sanitaire des Pays-Bas (C.H. / E.P.S. 48). F. in 4to, 294 pages.
7. The Prophylaxis of Diphtheria by the Determination of Susceptibles and their Active Artificial Immunisation in the United States, by Dr. Louis Van Boeckel (C. 169. M. 45. 1924. III). F. and E., in 4to, 62 pages each.

(*d*) Work of the Commissions.

*Expert Committee on Tuberculosis and Sleeping-Sickness in Equatorial Africa.*

8. Interim Report on Tuberculosis and Sleeping-Sickness in Equatorial Africa, by Andrew Balfour, E. Van Campenhout, Gustave Martin, A. G. Bagshawe (C. 8. M. 6. 1924. III). F. and E., in 4to, 127 and 122 pages.

*Committee on the Standardisation of Sera, Serological Reactions and Biological Products.*

9. Reports on Serological Investigations presented to the Second International Conference on the Standardisation of Sera and Serological tests held at the Pasteur Institute in Paris in November 1922. F. and E., in 8vo, 311 and 303 pages.
10. Investigations on the Serodiagnosis of Syphilis. Report of the Technical Laboratory Conference held at Copenhagen, November 19th to December 3rd, 1923 (C. 5, M. 5. 1924. III). Bilingual, in 8vo, 183 pages.
11. The Standardisation of Dysentery Serum, First Report by K. Shiga, H. Kawamura and K. Tsuchiya (C. 177. M. 49. 1924. III). E. in 4to, 71 pages.
    The Standardisation of Dysentery Serum, Second Report (C. 177 (*a*). M. 49 (*a*). 1924. III). E. in 4to, 58 pages.
12. Beiträge zur Standardisierung des Dysenterieserums (Reports on the Standardisation of Dysentery Serum). G. in 4to, 27 pages:
    1. Ueber Eigenschaften, Wirkungsart und Wertbestimmung des Dysenterieserums, von W. Kolle, H. Schlossberger und R. Prigge.
    2. Ueber die Auswertung der antitoxischen Dysenteriesera am Kaninchen, von Seigo Kondo (C.H. 213).

*Malaria Commission.*

*13. The Disappearance of Malaria from England, by S. P. James (C.H. / Malaria / 4). E., O.S., 11 pages.
*14. Malaria in the Kingdom of the Netherlands, by N. H. Swellengrebel (C.H. 196). E., in 4to, 72 pages.

*Sub-Committee on Cancer.*

*15. Proceedings of the Cancer Conference held at Rome, May 14th to 18th, 1924, and Report of the Cancer Sub-Committee to the Health Committee, September 1924 (C.H. 266). Bilingual, O.S. 45 pages.

*Epidemic Commission.*

16. The Prevalence of Epidemic Disease and Port Health Organisation and Procedure in the Far East, by F. Norman White (C. 167. M. 43. 1924. III). F. and E., O.S., 194 and 179 pages.
17. Rapport d'ensemble relatif à la campagne de vaccination exécutée en Grèce au cours de l'année 1923, par le Dr. Aimé Gauthier. (C.H. 149). F., in 4to, 94 pages.
*18. Report on an Investigation into the Sanitary Conditions in Persia, by Dr. John Gilmour (C.H. 262). F. and E., in 4to, 69 and 64 pages.

## II. Publications issued in 1925.

### A. *Already issued or in the press.*

(*a*) Periodical Publications of the Health Section.

1. *Monthly Epidemiological Intelligence Reports*, Nos. 74 to 76, bilingual, 141 pages.

(*b*) Organisation and Work of the Health Services in Various Countries.

2. Public Health Services in Hungary, by Dr. Alexander de Dobrovits (C.H. 265). F. and E., in 4to, 59 and 58 pages.
3. Organisation of the Public Health Services in Czechoslovakia, by Dr. Hynek J. Pelc (C.H. 268). F. and E., in 4to, 76 / 76 pages.
4. L'hygiène publique dans la population rurale de l'Ukraine, par le Dr. S. A. Tomiline (C.H. 279). F., in 4to, 50 pages.
5. Organisation of the Public Health Services in Latvia, by Dr. H. J. Cazeneuve (C.H. 283). F. and E., in 4to.

(*c*) Medical Interchange Monographs.

6. Health Organisation in Denmark (C.H. / E.P.S. 49). F. and E., in 4to, 429 and 435 pages.

(*d*) Work of the Commissions.

*Expert Committee on Tuberculosis and Sleeping-Sickness in Equatorial Africa.*

7. Further Report on Tuberculosis and Sleeping-Sickness in Equatorial Africa, by Andrew Balfour, E. Van Campenhout, Gustave Martin, A. G. Bagshawe (C.H. 281). F. and E., in 4to, 84 pages.

*Malaria Commission.*

8. Report on its Tour of Investigation in certain European Countries in 1924 (C.H. 273). Bilingual, O.S., 132 pages.
9. Le Paludisme en Asie-Mineure, par E. BENTMANN; Le Paludisme en Syrie et en Palestine, par Ernest BASSO (C.H. 275). F., O.S., 33 pages.

*Tuberculosis Commission.*

10. Die Tuberkulosestatistik, von Dr. Siegfried ROSENFELD (C.H. 284). G., in 4to, 235 pages.
11. Preliminary Report on the Causes of the Recent Decline of Tuberculosis Mortality, by Dr. Yves M. BIRAUD (C.H. 291). F. and E.,O.S., 50/50 pages.

(*e*) STATISTICAL HANDBOOKS SERIES.

12. The Official Vital Statistics of the Kingdom of the Netherlands (C.H. 159). F and E., in 4to, 78 and 77 pages.
13. The Official Vital Statistics of the Kingdom of Belgium (C.H. 162). F. and E., in 4to, 84 pages each.
14. The Official Vital Statistics of England and Wales (C.H. 270). F. and E., in 4to, 107 pages each.
15. The Official Vital Statistics of the Kingdom of Spain (C.H. 271). F. and E., 62 and 59 pages.

B. *In preparation.*

(*a*) PERIODICAL PUBLICATIONS OF THE HEALTH SECTION.

16. *Monthly Epidemiological Intelligence Reports* Nos. 77 to 85.
17. Statistics of Notifiable Diseases for 27 European Countries, 15 African countries, 14 American countries, 12 Asiatic countries and for Australasia for the year 1924 (*Epidemiological Intelligence*, No. 9). F. and E., O.S. 63 pages.
18. Year-Book on Public Health Progress in Various Countries in 1924. F. and E.

(*b*) ORGANISATION AND WORK OF THE PUBLIC HEALTH SERVICES IN VARIOUS COUNTRIES.

19. Public Health Services in the Kingdom of Bulgaria, by Dr. Ivan GOLOSMANOFF. F. and E., in 4to.
20. Public Health Services in the Kingdom of the Serbs, Croats and Slovenes, by Dr. A. STAMPAR, F. and E., in 4to.
21. Public Health Services in Finland, by the Public Health Administration of Finland. F. and E., in 4to.

(*c*) MEDICAL INTERCHANGE MONOGRAPHS.

22. Health Organisation in Belgium. F. and E., in 4to.
23. Health Organisation in Japan. F. and E., in 4to.
24. Protection of Public Health in the United States of America (Impressions from the First American Interchange Study Tour organised by the Health Organisation of the League of Nations, September-December 1923), by Dr. PICCININI. E.
25. Report on the Latin-American Interchange Study Tour in Cuba, the United States, Canada and certain European Countries. F. and E.

(*d*) WORK OF THE COMMISSIONS.

*Committee on the Standardisation of Sera, Serological Reactions and Biological Products.*

26. Reports on the Serological Investigations presented to the Conference on the Standardisation of Anti-dysenteric Serum held at Geneva, September 1924. In one language.
27. Reports on the Biological Tests presented to the Second International Conference on the Standardisation of Certain Biological Products. In one language.

(*e*) STATISTICAL HANDBOOKS SERIES.

28. Official Vital Statistics of the Kingdom of Italy. F. and E., in 4to.
29. Official Vital Statistics of Austria. F. and E., in 4to.

(*f*) MISCELLANEOUS.

30. Scarlet Fever. Statistical and Epidemiological Monograph by Dr. E. ROESLE. G.

C. H. 301.

**Annex 48.**

# EXEMPTIONS WHICH SHOULD BE MADE UNDER ARTICLE 8 OF THE OPIUM CONVENTION, 1925, AND ADDITIONS UNDER ARTICLE 10 OF THAT CONVENTION.

*Note by Sir George Buchanan submitted to the Committee on April 20th, 1925.*

Since the signature of the Opium Convention 1925, the Government Departments concerned with the question in Great Britain have given consideration to the pharmaceutical preparations which it would be desirable to exempt from the operation of that Convention under the term of its Article 8. It has not been thought necessary or desirable to consider in this respect any pharmaceutical preparations other than those whose formulæ and composition are officially established in the latest editions of the British Pharmacopoeia (B.P.) and of the British Pharmaceutical Codex (B.P.C.). The ground has in large measure been already covered by the official requirements of the Dangerous Drugs Act 1920, which governs administration on this subject.

Section 7 of the Dangerous Drugs Act, 1920, provides that Regulations may be made for controlling the manufacture, sale, possession and distribution of the drugs covered by the Act. In the Regulations made under this Section, the Secretary of State, in accordance with the advice of the Departmental Committee on the Draft Regulations under the Dangerous Drugs Act in their report of May 12th, 1921 (Cmd. 1307), and with the concurrence of the Minister of Health, exempted from the Regulations seventeen medicinal preparations, each of which contains a sufficient proportion of morphia to bring it within the scope of the Opium Convention and, therefore, the Dangerous Drugs Act. A list of the exempted preparations is given in Schedule 2 of the Regulations and set out at the end of this note.

These preparations were exempted because, for various reasons, it is deemed impracticable to use them for purposes of addiction. For instance, four of the preparations, viz.:

Pil. hydrarg. c. cret. et opii. B.P.C.
» ipecac. c. scilla, B.P.
» digitalis et opii. co. B.P.C.
Pulv. ipecac. co., B.P. (Dover's Powder).

contain ipecacuanha, and a person who administered to himself a sufficient quantity of any of these preparations to obtain gratification of the opium habit would have also to take sufficient ipecacuanha to make him sick. Ten of the preparations, viz.:

Cereoli iodoformi et morphinæ, B.P.C.
Emp. opii. B.P. 1898.
Lin. opii, B.P.
» » ammon. B.P.C.
Pasta arsenicalis, B.P.C.
Pil. hydrarg. c. opio, B.P.C.
» plumbi c. opio. B.P.
» hydrarg. c. cret. et opio, B.P.C.
Suppos. plumbi co., B.P.
Tablettæ plumbi c. opio, B.P.C.

contain a poisonous substance in addition to the opium or morphia, *e.g.* iodoform, arsenic, lead, and a person taking a sufficient quantity of any of these preparations to gratify opium addiction would be poisoned by the additional poison present.

The remaining preparations, while not poisonous, are sufficiently nauseous to make it extremely unlikely that any person would resort to them for purposes of addiction. This consideration applies also to many of the preparations dealt with in the preceding paragraph.

Since the issue of these Regulations, the Home Office has from time to time been asked, *e.g.* by the British Pharmaceutical Society, to extend the list of exemptions to include *compounds* of the preparations already exempted. It has been felt, however, that such extension would be unsafe. The exempted preparations are incapable of being used as drugs of addiction because they contain certain ingredients which render them unsuitable for use for this purpose. It may be possible, however, for chemical science to discover a means of neutralising these effects by the addition of further ingredients and thus render the preparations capable of being used for addiction purposes. Recently, however, the British Pharmaceutical Society having again put forward proposals for extending the list of exempted preparations, the Ministry of Health has advised as follows:

(1) That it is undesirable to exempt all compounds which contain the preparations actually exempted; *but*

(2) The following compounds may be exempted provided that it is definitely settled that no other dangerous drugs may be added to them:

(*a*) Mixtures of Dover's Powder with mercury and chalk, aspirin, phenacetin, quinine, and its salts, and sodium bicarbonate.

(*b*) The two liniments specified in the list of exemptions, if mixed with any other British Pharmacopœial or British Pharmaceutical Codex liniment.

(*c*) The two ointments and the plaster specified in the list of exemptions, if mixed with other ointments and plasters contained in the British Pharmacopœia or British Pharmaceutical Codex.

In the circumstances detailed I have been directed to request consideration by the International Health Offices of the following proposals:

1. That the list of exempted preparations under Article 8 should include those exempted preparations which are specified in Schedule II, to the British Dangerous Drugs Act Regulations, May 20th, 1921, at present in force, namely:

Cereoli iodoform. et morph., B.P.C.
Emp. opii, B.P. 1898.
Lin. opii, B.P.
» » ammon, B.P.C.
Pasta arsenicalis, B.P.C.
Pil. hydrarg. c. opio. B.P.C.
» ipecac. c. scilla, B.P.
» plumbi c. opio, B.P.
» digitalis et opii co., B.P.C.
» hydrarg. c. cret. et opio, B.P.C.
Pulv. cretæ aromat. c. opio, B.P.
» ipecac. co., B.P. (Dover's powder)
» kino co., B.P.
Suppos. plumbi co. B.P.
Tablettæ plumbi c. opio, B.P.C.
Ung. gallæ c. opio, B.P.
» gallæ co., B.P.C.,

and also to compounds containing these exempted preparations to the extent specified in 2 (*a*), (*b*) and (*c*) above.

2. That the consideration of the action, if any, to be taken under Article 10 — Addition to the List of Drugs coming under the Convention — should be postponed until the Governments concerned have had time to give the matter adequate consideration.

April 1925.

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**Annex 49.**

## LATIN-AMERICAN INTERCHANGE OF HEALTH PERSONNEL.

*Letter from the Director-General of the Cuban Health Service to the Medical Director.*

Havana, March 10th, 1925.

*(Translation).*

The gentlemen participating in the Latin-American interchange of health personnel held at Havana under the auspices of the League of Nations embarked to-day for New Orleans. The general programme of work which I had the honour to communicate to you was duly and completely carried out, and on their departure the public health officials were good enough to express to me their great satisfaction with the work accomplished.

The Cuban Government, represented by the Secretary of State for Health and Public Welfare, took the greatest interest in the public health interchange and provided it with facilities of every kind likely to ensure its success.

The professional associations, the School of Medicine and other medical institutions, other representative bodies and in particular the Press, vied with one another in their attentions to the officials participating in the interchange and paid a warm tribute to the admirable initiative of the League of Nations in organising this valuable interchange. So enthusiastic was the reception of the interchange and such widespread interest did it arouse that, in the course of conversations with the majority of the participants, we conceived the idea, which I submit for your consideration, of fixing Havana as a permanent headquarters of public health interchanges under the auspices of the League of Nations, by creating in this town a permanent directing board to organise interchanges in other countries.

By reason of her geographical position and easy communication with the whole of America, Cuba offers great advantages as headquarters. I may add that, besides the general public health services, we maintain on a large scale and on a permanent footing the following organisations in which we have specialised:

1. Campaign against mosquitoes in their various stages of development — larval and adult.

2. Campaign against rats. Fumigations on large and small scale with hydrocyanic acid.
3. Rural hygiene. Housing and health protection of agricultural labourers.
4. Eugenics and protection of children with suitable institutes.
5. Compulsory vaccination of the civil population against typhoid and smallpox.
6. Compulsory notification of infectious diseases, and campaign against tuberculosis.

I can assure you in advance that the Cuban Government would hail with the greatest satisfaction the selection of Havana as permanent headquarters and would give those who take part in the interchanges every facility to carry on their work. We have even considered the provision of special accommodation for those who take part in the interchanges during the period of their studies.

I myself am Professor of Hygiene and am prepared to organise a special course at the School of Medicine on tropical hygiene and preventive medicine to which those who take part in the interchanges and other medical men who might wish to attend them would be admitted free of charge. In this way, we should create an important group of health experts on questions of tropical hygiene.

Another professor, Dr. Domingo F. Ramos, informs me that he will be delighted to help by giving courses in eugenics, physiological and pathological heredity, infant dietetics and other questions connected with the improvement of the human race.

If you approve of this idea, we will send you a general programme of the courses and of the various subjects which will be dealt with. The teaching would be of an eminently practical nature, as we have at our disposal a number of laboratories, eugenics institutes, and other facilities which the Government of Cuba will place at your disposal free of charge.

If you consider that any financial contribution would be required on the part of the Cuban Government, please let me know quite frankly, in order that I may make the necessary arrangements; I know that I can rely on the generous and patriotic assistance which our Government is always ready to afford to any work of progress and civilisation.

*(Signed)* Lopez del VALLÉE.

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C.H. 302.

**Annex 50.**

## ANNUAL REPORT OF THE HEALTH ORGANISATION.

*Note by Sir George Buchanan, submitted to the Committee on April 21st, 1925.*

Geneva, April 17th, 1925.

In the multitude of activities in which the Health Organisation of the League is engaged, the form, time, and manner of the presentation of the Annual Report of our Health Committee has perhaps not received quite the amount of consideration it deserves. The presentation of this report to each Assembly is one of the duties laid down in our Statutes, and the document has importance in several ways.

1. Every public organisation of importance — and ours is becoming of considerable importance, and is now one of the permanent technical organisations of the League — should summarise its proceedings with care once a year. If, as in our case, its work and expenditure is diffused in many different directions, the report should explain what has been done and what it is proposed to do under each heading, with clarity and impartiality. This statement should enable our work to be studied in relation to the financial position. A statement of the details of the last approved budget and the proposals of the Health Committee for the coming budget should be invariably included in the report. From many points of view also it may be necessary to consider work done by the central staff at Geneva on the one hand, and that done by members of the Health Committee and by special Commissions on the other. The document should therefore set out clearly the personnel of the Health Section of the Secretariat and any changes in it during the year, and it should also show the nature, membership, and objects of each permanent Commission, and note the reports made by each.

As regards those services, like the Epidemiological Intelligence Service and the Interchange Service, which are administered by the permanent staff at Geneva, the main results of the year's work should be stated, and, in the case of the interchanges, in such a way as to show clearly how the not inconsiderable sums allotted by the Rockefeller Foundation and by the Assembly for this purpose have been utilised, and what public health organisations of what countries have benefited by them. The same applies to the services for international statistical work, study of public education, and other services maintained by special grants.

The report should form a volume of handy size and shape, published (and ultimately placed on sale) each year as part of an annual series which should be essential not only to members of this Committee and of our Advisory Health Council, but also to Government Public Health

Officers and hygienists throughout the world. This series would naturally form the standard set of books to which reference would be made for authoritative statements of what has been done by our Organisation. Few people can be expected to keep complete sets of our multifarious publications and reports — but all important public health offices could get these annual records, and with their aid could follow up any special subject which the Health Organisation has taken into its charge and can learn what it has done on that subject.

2. It is particularly important to consider the utility of such a series of volumes to the Governments and their Public Health Departments in the case of nations which are not represented on the Health Committee by any of their nationals. If it is sometimes difficult even for members of the Health Committee to realise what is being done under their name and authority, it is far more so in the case of nations (Members of the League or otherwise) which are not in touch with the work of the Committee. Annual reports such as are above suggested would do much to remove this difficulty. In them it would be always possible to find the records of the work done by the Health Organisation as a whole, to understand its programme, and to realise the limitations which it rightly sets to its activities and to its relations with public health officers and Government public health services.

The delegations at the Assembly, who have to consider both the work and the expenses of the Health Organisation, would, I feel sure, find benefit in the fact that such a report had been issued in advance of the session of the Assembly. Time and opportunity would have been given in most cases for their technical advisers to have studied it, and to have advised them upon it before the Assembly met. The Health Committee itself cannot but gain by the enlarged basis of support which this action would secure to it, and by the fuller understanding of the duties and objects of the Committee which would result.

3. An annual report of this kind should receive consideration from the Health Committee as a whole, not only because much depends on the way in which the results of past work are presented, but also because of the observations in regard to future work. The acceptance of the report by the Assembly involves an approval or even a direction to follow the proposals set out in the report. To secure this it would be convenient (subject to allowing for the possibility of later additions as suggested below) that the report should be prepared in draft for consideration at the session of the Health Committee immediately preceding the Assembly. If this were in April, the report could relate to an annual period up to that month in each year. Allowing for the delay which would probably be entailed by the submission of the report to the Council and printing off the copies, the document could then be circulated to Governments and public health offices at a date convenient and appropriate to enable it to be studied and apprehended in the majority of countries before the Assembly met. Should action be taken subsequent to the April session of the Health Committee which the President considers important to bring to the notice of the Assembly, he might be requested and authorised by the Committee to submit a supplementary note on behalf of the Health Committee, of which he would send us copies. It is not probable that this authority to the President would have to be exercised often. There would have been no meeting of the Health Committee since the issue of the report.

4. It may be objected that the above proposal would add one more item to the work of the April session of the Health Committee. If at every April session we are to be confronted with as great a mass of subjects for discussion and decision as we have before us on this occasion, how can we ever find time for anything more ? To this it may be replied not only that the responsibility of the Health Committee for the report ought to give it precedence, but that the discussion on it, as it seems to me, would give us in the Health Committee a most valuable opportunity, when considering the work as a whole, to make adjustments which would obviate much of the congestion from which we suffer at present at our sessions, and which I am personally convinced need not occur if we could find time to give our minds to considering how to prevent it.

To give effect to the above suggestions I would ask leave to propose:

> " The Health Committee, on consideration of the procedure which is most suitable for the preparation and submission of the Annual Report required by its Statutes, is of opinion the terms of this report should be settled by the Committee at its session during the spring of each year, being the last session held before the meeting of the Assembly, and that, subject to the assent of the Council, it should then be circulated as soon as possible to Governments Members of the League and other authorised recipients of the report."

**Annex 51.**

# PRELIMINARY REPORT ON THE CAUSES OF THE RECENT DECLINE OF TUBERCULOSIS MORTALITY,

BY YVES M. BIRAUD, M.D.

I. Interpretations of the Decline of Tuberculosis Mortality.
II. Some Statistical Facts about the Course of Tuberculosis Mortality.
III. Conclusions and Suggestions for further Investigations.

## Part I.

## INTERPRETATIONS OF THE DECLINE OF TUBERCULOSIS MORTALITY.

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1. Is there actually a decline of tuberculosis mortality ?
2. Can it be due to chance variation ?
3. Or to unexplained *cyclic changes* in the virulence or infectivity of the *tuberculosis bacillus* ?
4. Or to *differences in the resistance* of the populations:
   - (*a*) Through natural selection and elimination of the unfit ?
   - (*b*) Through an increased resistance transmitted through heredity ?
   - (*c*) Through a more universal personally acquired resistance (tuberculisation in childhood and its protective influence. Clinical tuberculosis outbreak through adverse environmental conditions or renewed mass infections) ?
5. Influence of the *improvement of economic conditions* and higher *standard of living*:
   - (1) Better *feeding* of the population;
   - (2) Better *housing;*
   - (3) Better industrial working conditions and shorter working hours;
   - (4) Stabilisation of the industrialisation process.
6. Influence of a *higher health standard* of the population:
   - (*a*) Brought about by a reduction in communicable and water-borne diseases;
   - (*b*) Diminution of alcoholism;
   - (*c*) Raised standard of popular education and consequently of personal hygiene.
7. Effects of *direct anti-tuberculosis measures*:
   - I. (*a*) Effect of early diagnosis;
     (*b*) Effect of improved treatment.
   - II. Effect of the prevention of mass infection:
     (*a*) Through milk control;
     (*b*) Prevention of contact infection:
     (1) Through *education* of the patients and their families through the dispensaries and the home visiting nurses;
     (2) Through segregation of open cases in institutions, sanatoria and hospitals.
   - III. Confirmation of the effect of direct tuberculosis measures by the demonstrations of the Metropolitan Life Insurance Company.

Summary.
References.

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The decline in the tuberculosis mortality which has occurred in various countries during the latter part of the last century and has been even more noticeable in the present century has attracted much attention both in the countries which benefited from it and in those which did not.

It was quite natural for the scientists and health authorities of the latter countries to seek the causes of the decline and to attempt to apply them at home in order to bring about the same beneficial effect.

But the determination of these causes proved remarkably difficult and complex. Indeed, the question of the causes of the decline in tuberculosis mortality involved the tremendous problem of the causes of mortality itself. This problem had given rise during the last century to an enormous amount of literature.

The opinions expressed reflected the trend of thought of the medical profession and of their leaders in the fields of pathology and bacteriology. They followed, and to a certain extent apparently still follow, fashions.

It is needless to go back to Hippocrates' notion of the infectivity of tuberculosis and all the groundless theories of the past — the opinions and theories entertained at present are varied enough to afford sufficient food for thought and ground for discussion. They will be reviewed briefly. Whether or not they fit in with the facts may be seen by comparing them with the detailed analysis of the mortality statistics presented in the next section of this report.

The close comparison of different national experiences and the resulting elimination of many of the variables (which make this task very difficult for any single country) will, it is hoped, allow a better understanding of the true relative value of the factors involved. It may also direct the way to new avenues through which the complex and many-sided problem may be approached.

**1.** But the first question arises: "Has a decline really taken place?" Yes, the decline is a fact, worldwide, though by no means universal or always similar in those countries where it has taken place.

Roughly, tuberculosis mortality has decreased 70 per cent in England and Wales since 1851 and by the same amount since 1871 in Scotland and since 1890 in Denmark.

It has been reduced by more than one-half in the registration area of the United States of America since 1900.

This decline is the more striking when one considers that tuberculosis is better diagnosed and more frankly reported as a cause of death now than in the past.

**2.** The downward trend of the mortality has been definite, the rate of decline being surprisingly constant from year to year (with even a tendency to increase in some countries).

**3.** The decline, it has been suggested, might be due to one of those changes, occurring in cycles without apparent cause, which have been observed in the prevalence and severity of scarlet fever and smallpox *(12)* [1].

Such cyclic changes might be due to decreased infectivity or decreased virulence of the causative agent.

Experimental evidence shows, on the contrary, that for the last 35 years, during which the decline of tuberculosis has been most marked, the infectivity and virulence of the human strains of the tuberculosis bacillus have been remarkably constant in the laboratory tests on animals in all countries (Royal Tuberculosis Commission 1911). The difficulties experienced by CALMETTE in obtaining his B.C.G. non-toxic strain — not to mention the innumerable failures in similar attempts — only confirm this point.

Moreover, this theory of gradual change in virulence of the bacillus cannot account for the sharp differences existing in the tuberculosis mortality of countries, or even of districts lying close to each other where every facility exists for cross-infection and the intermixing of the infecting strains, which should result in an equalisation of the tuberculosis death-rates were the differences of mortality due merely to differences in these strains.

It appears, therefore, that, if the explanation must be sought outside the causative organism, it must lie in the resistance opposed to its invasion by the human race.

**4.** But the causes of these changes of resistance are far from being uniformly or universally accepted.

(*a*) Some claim that the increased racial resistance proceeds from natural selection and gradual elimination of the unfit. *(19, 31.)*

They may go as far as saying that anti-tuberculosis work is dangerous as preventing this natural process of racial protection *(19)*.

But how could this theory explain the different experiences of countries like England and France, where the tuberculosis bacillus has been equally prevalent for centuries? Why has the weeding-out of the tuberculous stock taken place in England only?

(*b*) A claim frequently made is that the decline is due to an *increased* resistance transmitted through heredity. This belief was partly due to the observation of a different tuberculosis incidence in various racial stocks in a mixed population (United States of America). *(15, 17.)*

The existence of specific racial predisposition or resistance cannot be doubted, and this means, of course, hereditary transmission of these traits. But it is hard to conceive that these traits could have been *modified* to the extent shown by the decline in the course of a few decades, whilst the tuberculisation of these races has lasted centuries. It is also hard to understand why the decline has not been parallel in equally tuberculised countries.

No support is given by experiment to the belief that either an increased predisposition or an increased resistance to tuberculosis can be inherited. *(3.)*

Tuberculous mothers with active tuberculosis transmit tuberculous anti-bodies to the children they bear; these anti-bodies disappear from the infants' blood very shortly after birth *(83)*, leaving therefore no permanent immunity.

If it is true that those tuberculosis patients have more chances of recovery who have a tuberculosis family history *(23, 79, 14)*, this does not prove whether the increased resistance is hereditary or acquired through childhood inoculation and constant home active immunisation.

(*c*) Increased resistance of the population through individually acquired resistance is a much more widely accepted theory — not to say fact.

A close study of the clinical forms of tuberculosis, of the results of the VON PIRQUET test, and of the tuberculosis mortality curve for the various age-groups, coupled with epidemiological comparisons with tuberculosis morbidity and mortality in formerly isolated and tuberculosis-free races, has brought about the belief, more or less common now, that in so-called "tuberculised" countries, individuals are infected in early childhood; following this primo-inoculation, a generalised, rapidly fatal tuberculosis occurs, or more frequently a comparative immunity takes place, kept up either by latent minute tuberculous foci or by minute secondary inoculations or both. *(29, 30, 4, 1, 3, 8.)* The vast majority of individuals thus "tuberculised" remain free from clinical manifestations. Among the minority who show signs of tuberculous disease, the breakdown according to some *(30, 27, 32)* is due to a development of the original childhood infection,

[1] This and following like numbers refer to the Bibliography on page 112.

permitted by a break in the bodily resistance, occasioned by adverse environmental conditions. According to others *(24)*, it should be ascribed in the majority of cases to renewed mass-infection or "sur-infection". In any case, the renewed tuberculosis infection assumes a different clinical course. As BROWNLEE has pointed out *(2* and *8)*, after the generalised tuberculosis of infancy, one finds sub-acute tuberculosis (of the lungs chiefly) in early adult life (20 to 25 years) and later a more chronic lung tuberculosis (middle age and late adult forms). The lack of the protective influence of a preceding infection is shown by the tremendous prevalence of the severe so-called "infantile" type of the disease to be found when tuberculosis first reaches a population (African tribes, for instance) previously free from the infection. *(26, 34, 3.)* The important bearing of the acquired immunity on the tuberculosis decline will be considered in connection with the influence of urbanisation.

**5.** Nearly all students of the tuberculosis problem emphasise the importance of *economic conditions* and stress the change which has taken place during the last century in the standard of living of the people, of the working class especially. Better wages have brought about an improvement in the mode of life of the population. This has been specially noticeable in those very countries where the decline of tuberculosis has been most marked — the United States and England. That there is a close correlation between poverty and tuberculosis is not doubted (at least among the tuberculised population). *(37, 35, 38, 39,* etc.*)*

But the standard of life is a very complex matter indeed, and its changes more so. No wonder that individual observers have not been unanimous in apportioning the responsibility of the tuberculosis decline among its various elements.

(1) In England, where the questions of pauperism and scarcity of *food* products have been in the past more felt and better studied than elsewhere, the increased *food consumption per capita* has always been emphasised. *(42, 43, 44, 45, 46, 47.)*

The experience of the war in Central Europe, Austria, Germany, and to a smaller extent in the Netherlands, Denmark and Switzerland, when tuberculosis mortality very closely followed food scarcity, has turned the attention of the phthisiologists of these nations to the role of food in relation to clinical tuberculosis outbreaks and mortality. Indeed, the war food crisis was a remarkable counter-experiment to the pre-war studies of the food-tuberculosis relationship.

(2) Second to food is the question of *housing*. There again there is universal agreement on the danger of overcrowding, lack of proper ventilation and lighting. Housing has been considered a decided factor. This opinion, though undoubtedly true, has been founded mostly on *a priori* reasons, because in reality bad housing has nearly always been associated with poverty and insufficient diet, and its specific influence could be more easily guessed at than actually measured. Owing, perhaps, to the existence of tenement and slum conditions, the French and Italians, and before the war the Germans, have constantly been stressing the importance of housing. *(48, 49, 50, 52, 54, 55.)*

(3) Shorter working hours, the suppression of child labour, limitation and supervision of women's industrial employment, together with the betterment of factory conditions, have also been reckoned as causal elements in the tuberculosis decline in the United States of America and England.

(4) Apart from the improvement in the standard of life, another economic factor has been brought to light by English authors:

The *stabilisation of the industrial population*. Rapid city growth during the period of industrial expansion (middle and latter part of the 19th century in England) caused a considerable migration from country to city of an "unsalted" rural stock *(56, 57, 58, 59)* — in other words, of a population non-tuberculised or insufficiently tuberculised to resist city mass-infection — hence a very high urban tuberculosis mortality. Acclimatisation to city life of one part of the population was counter-balanced by the continued influx of the rural "unsalted" element. With the diminution of this new city-ward migration, the downward trend of tuberculosis mortality of city dwellers was bound to assert itself.

**6.** Tuberculosis decline could be and has been considered merely as a result of a higher "health standard" of the population, the betterment of this so-called "health standard" being measured by the notable decrease of the general death-rates and the subsequent increase in the span of life which has taken place in all civilised countries.

(*a*) Of course, causes tending to better the health of the individuals increase their resistance to a number of infectious diseases, among them tuberculosis. Amongst them the following causes have been noted as partly responsible for the tuberculosis decline: better sanitation, reducing the prevalence of intestinal infections (typhoid, dysentery) and the control of acute communicable diseases, by preventing the lowering of resistance and the break of the "allergic" state, have undoubtedly a share in this result.

(*b*) The decrease in alcoholism in England, France and Scandinavian countries has also been mentioned.

(*c*) The raised standard of popular education has undoubtedly helped to promote personal cleanliness for æsthetic and hygienic reasons, and more and prompter attention to minor and major bodily ills, permitting earlier medical attention.

**7.** Last but not least comes the study of the actual results produced by the *direct anti-tuberculosis methods*.

Again, all authors agree that better diagnosis and treatment of the tuberculous, and the prevention of alimentary and contact infection have played their part, but it is hard to differentiate the relative influences at work.

I. Better diagnosis and treatment of the sick:

(*a*) *Early diagnosis* has acted in two ways: it has permitted earlier treatment, and, in consequence, arrest of the manifestations and retarding of death, which bears directly on the death-rate.

But early recognition of the cases, coupled with appropriate education of the patients, has undoubtedly also acted indirectly on the death-rate, preventing contact mass-infection in families by patients being in ignorance of their own contagiousness.

(*b*) *The treatment of active tuberculosis*, in spite of its definite progress in several directions, cannot be considered as responsible for a large part of the decline of mortality.

In the study of the after-history of patients discharged from sanatoria *(78, 79, 80)*, if one considers, on the one hand, the percentage of patients really prevented from dying and, on the other, the comparatively small percentage of the tuberculous given sanatorium treatment, one can scarcely escape the impression that the beneficial effect of sanatoria must have been chiefly indirect (educative and segregational). *(81, 82.)*

II. *The prevention of mass-infections* has justly been more emphasised.

(*a*) Following CALMETTE's researches on intestinal tuberculosis infection, an extensive effort has been carried out in the United States of America and some parts of Canada to prevent infection of children by *milk* by means of wholesale pasteurisation or elimination from herds of tuberculin-reacting cows.

In these countries health authorities claim that this has reduced markedly the infant and child mortality *(67)*. This opinion is, however, not held unanimously, some authors claiming that milk infection in childhood produces a beneficial tuberculosis immunity and protection for later years.

On these theories is superimposed the opinion of MCCOLLUM *(68)* and others who claim that milk, through its butter fat and fat-soluble A vitamin content, is a great factor in building up the resistance. These more or less conflicting statements make a detailed study of childhood tuberculosis statistics in relation to milk consumption and control full of interest and a possible source of important information.

(*b*) The prevention of contact infections has been definitely fostered in later years by the various tuberculosis measures, and that it has been an important factor in the tuberculosis reduction is undoubted. This result has been brought about by two sets of factors, whose relative efficiency has been variously estimated by different authors; they can be summarised as:

(1) *Education.* Apart from the raised standard of intelligence and general education, and even apart from the dissemination of health knowledge to the public at large by oral and printed propaganda the influence of which has been previously stated, specific *health education* and contagion prevention have been greatly fostered by *dispensaries* and their home-visiting nursing staff. The same remark applies to the sanatoria, where patients learn how to take care of themselves and, later, of their families. The educative influence of the sanatorium is, however, limited because of the much smaller number of patients its action can reach.

(2) The factor of *segregation* of open cases in *sanatoria* and especially *hospitals* for late cases is apparently of considerable importance. *(81, 82, 72, etc.)* NEWSHOLME showed by statistics that, theoretically at least, it could in itself account for the reduction of tuberculosis in recent years in England. *(82.)*

The comparative influence of the anti-tuberculosis campaigns and schemes, on the one hand (dispensaries and hospitals, sanatoria and social service), and of the general health and economic factors on the other, has been, of course, the subject of extensive controversy. The majority of tuberculosis writers consider direct anti-tuberculosis action as more important than all the other factors. *(6, 72.)*

III. It is impossible, in fact, not to feel the weight of large-scale "experiments" such as the health education and control of the Metropolitan Life Insurance Company on its millions of policy-holders, which brought about a rate of decline markedly greater than the rate of the general population *(75.)*.

The results of the Framingham demonstration also show remarkable "experimental evidence" of the value of specialised tuberculosis measures. *(69, 75.)*

Confirmation of the Framingham results, by wider experiments, along the same lines, undertaken by the Millbank Memorial Fund in urban and rural sections of New York State, is anticipated with considerable interest by all students of the problem.

* * *

Summarising the various opinions expressed, one may say that the most conspicuous causes of the reduction of tuberculosis mortality are:

1. Higher standards of living, especially better feeding and housing of the population;
2. Segregation of open cases (hospitals and sanatoria);
3. Increased health education of patients and their families through dispensaries and their agents.

The last two factors come within the scope of the direct anti-tuberculosis measures.

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## Part II. — SOME STATISTICAL FACTS ABOUT THE COURSE OF TUBERCULOSIS MORTALITY.

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A. Note on the Classification of the Forms of Tuberculosis.

B. Statistics of:

1. England and Wales.
2. Scotland.
3. The Kingdom of the Netherlands.
4. Amsterdam.
5. Paris.
6. Switzerland.
7. Bavaria.
8. Miscellaneous :
   (*a*) France.
   (*b*) Germany.
   (*c*) Spain.

C. Comments.

### A.

### NOTE ON THE CLASSIFICATION OF THE FORMS OF TUBERCULOSIS.

Before discussing in detail tuberculosis mortality statistics, one must point out that it is nearly impossible to use, for researches on tuberculosis, the detailed classification of the International List.

This is due partly to its decennial changes, but still more to the changes in the terms used by physicians in their death certificates in the cases where two different titles exist for the same form of the disease (scrofula and tuberculosis of the lymph glands), and where differential diagnosis is too delicate (intestinal and peritoneal tuberculosis).

Another danger of the detailed classification is that it divides the deaths into small numbers, which prevent the rates computed from them from being significant.

In order to do away with these disadvantages and to counterbalance to a certain extent the changes brought about by more accurate medical diagnosis (tuberculosis in infants, and of the genito-urinary organs, for instance), it seems necessary to limit the statistical study to groups of clinical forms which may be complex but are well defined and on which, consequently, retrospective enquiry is possible. The following classification seems most convenient:

1. *Pulmonary tuberculosis* (including tuberculosis of the larynx, lungs, pleura and miliary tuberculosis with a primary pulmonary focus).
2. *Cerebro-meningeal tuberculosis* (including all the intra-cranial localisations).
3. *Abdominal tuberculosis* (including tuberculosis of the intestine, peritoneum and lymph glands of the abdomen).
4. *Tuberculosis of the other organs* (including all other forms and especially the bone, joint, and lymph gland tuberculosis which have been long considered due to the bovine type of tuberculosis bacillus).

### B.

### STATISTICS.

#### 1. Tuberculosis Statistics of England and Wales.

*Sources.* — The figures and rates in this study have been taken from the "Annual Reports of the Registrar-General of England and Wales"; from the supplement to the seventy-fifth of these reports; from the "Statistical Review of England and Wales" and the "Annual Report of the Chief Medical Officer of Health". In order to study the trend of tuberculosis mortality in England standardised rates were taken for tuberculosis of all forms, for pulmonary tuberculosis and non-pulmonary tuberculosis from 1851-1921 (Table I). This material was considered by years, by five-year periods and by 10-year periods for males, females and both sexes. Decennial rates by forms of tuberculosis and age groups have been presented for the period 1861 to 1910 in Table II.

Yearly rates since 1911 are given in Table III in order to make the detailed study of the war influence possible. The following classification has been adopted:

Respiratory tuberculosis, cerebro-meningeal tuberculosis, abdominal tuberculosis, tuberculosis of the other organs, and total tuberculosis.

Rates were taken separately by sexes and for all the population.

## Tuberculosis from all Forms in England and Wales since 1851.

During the first decennium, male and female rates are practically identical; since then, female rates have declined faster than males, 65 per cent instead of 51 per cent. The total decline for both sexes is 58 per cent.

If we turn to *non-pulmonary tuberculosis*, we notice that the female rate has declined less than the male (46 per cent instead of 49 per cent). Comparing the decline among males of pulmonary and non-pulmonary tuberculosis, we see that it has been closely parallel and nearly equal for each form (49 and 51 per cent).

In females the decline for pulmonary tuberculosis has been much more marked than for the non-pulmonary forms. Taking both sexes together, pulmonary tuberculosis has declined markedly faster than non-pulmonary. Due to the more rapid decline in pulmonary tuberculosis, non-pulmonary tuberculosis in males makes up 23 per cent of the total in the last decennium instead of 14 per cent as in the first. In females the proportion of non-pulmonary to total tuberculosis has increased from 18 to 28 per cent in the same period. If we consider the rates for total tuberculosis by 10-year and by five-year periods, we see that in both sexes the decline has been continuous and steady during the period considered with the exception of the last five-year period, in which males show a slight rise due to the war conditions and influenza. The same causes, though applying also to females, are not shown markedly by the quinquennial rate. The same steadiness in the decline also applies to pulmonary tuberculosis, but there the rise of the war period is comparatively greater in both sexes. The war rise scarcely affected the mortality from non-pulmonary tuberculosis in either sex. As Stevenson has pointed out, the constancy has been in the actual amount of the fall and not the rate of fall—indeed, the latter has been increasing.

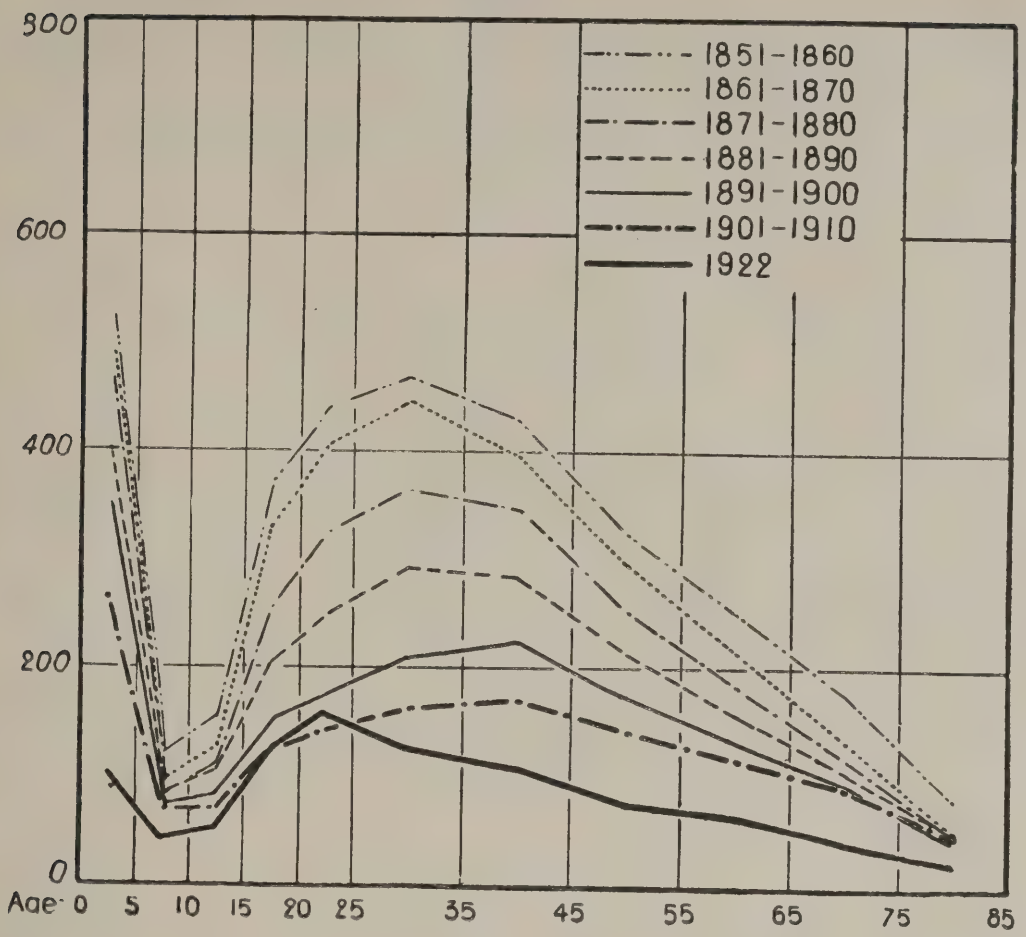
**Tableau I. — Table I.**

Angleterre et Pays de Galles: Mortalité standardisée par million
England and Wales: Standardised Mortality from Tuberculosis, 1851-1921, per 1,000,000.

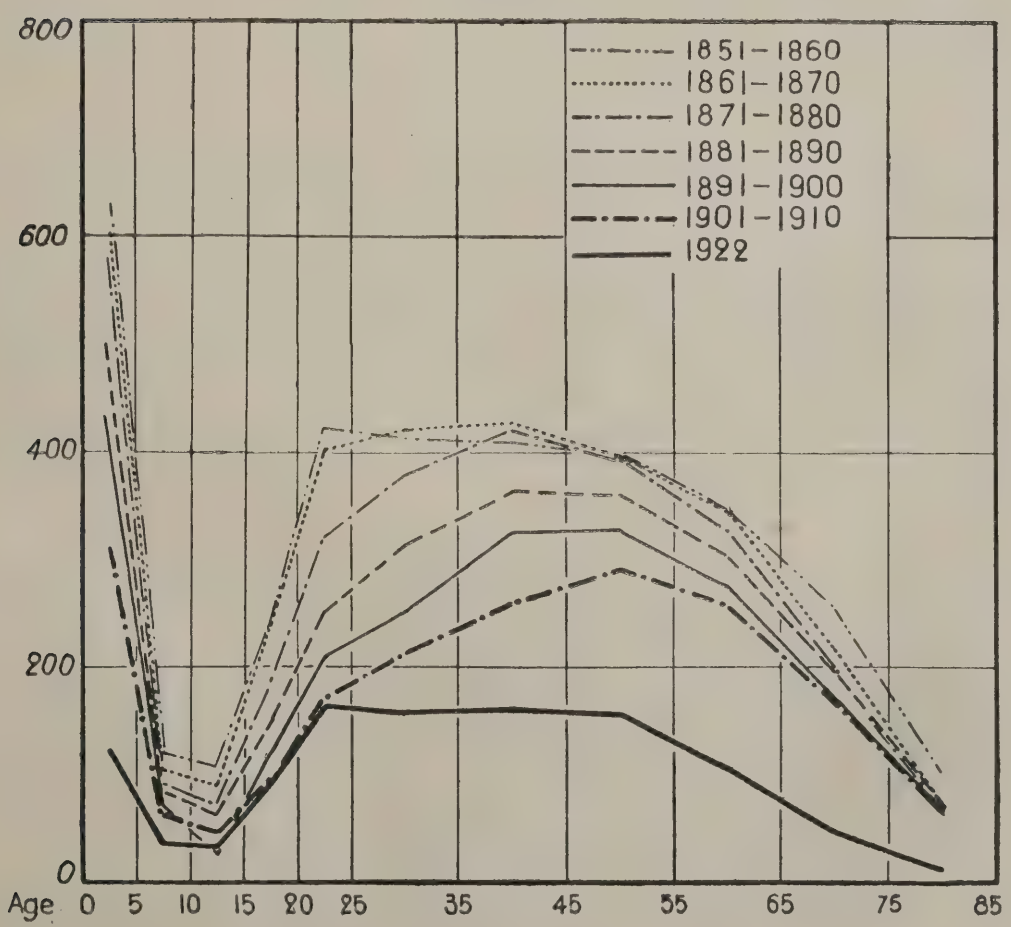
| Période Period | Toutes formes All Forms | | | Tuberculose pulmonaire Pulmonary | | | Tuberculose extra-pulmonaire Non-Pulmonary | | |
|---|---|---|---|---|---|---|---|---|---|
| | M. | F. | 2 sexes | M. | F. | 2 sexes | M. | F. | 2 sexes |
| 1851-1860 . . | 3.477 | 3.483 | 3.478 | 2.694 | 2.854 | 2.772 | 783 | 629 | 706 |
| 1861-1870 . . | 3.357 | 3.177 | 3.263 | 2.612 | 2.578 | 2.590 | 745 | 599 | 673 |
| 1871-1880 . . | 3.080 | 2.701 | 2.882 | 2.359 | 2.119 | 2.231 | 721 | 582 | 651 |
| 1881-1890 . . | 2.656 | 2.251 | 2.444 | 1.966 | 1.672 | 1.810 | 690 | 579 | 634 |
| 1891-1900 . . | 2.285 | 1.780 | 2.021 | 1.633 | 1.226 | 1.418 | 652 | 554 | 603 |
| 1901-1910 . . | 1.891 | 1.424 | 1.646 | 1.358 | 951 | 1.143 | 533 | 473 | 503 |
| 1911-1920 . . | 1.705 | 1.210 | 1.446 | 1.306 | 868 | 1.076 | 399 | 342 | 370 |
| 1851-1855 . . | 3.641 | 3.636 | 3.638 | 2.814 | 2.967 | 2.890 | 827 | 669 | 748 |
| 1856-1860 . . | 3.320 | 3.338 | 3.328 | 2.581 | 2.747 | 2.663 | 739 | 591 | 665 |
| 1861-1865 . . | 3.376 | 3.262 | 3.316 | 2.607 | 2.649 | 2.625 | 769 | 613 | 691 |
| 1866-1870 . . | 3.343 | 3.103 | 3.217 | 2.617 | 2.511 | 2.558 | 726 | 592 | 659 |
| 1871-1875 . . | 3.148 | 2.782 | 2.956 | 2.452 | 2.219 | 2.327 | 696 | 563 | 629 |
| 1876-1880 . . | 3.021 | 2.631 | 2.818 | 2.273 | 2.026 | 2.141 | 748 | 605 | 677 |
| 1881-1885 . . | 2.744 | 2.389 | 2.558 | 2.053 | 1.809 | 1.922 | 691 | 580 | 636 |
| 1886-1890 . . | 2.578 | 2.128 | 2.342 | 1.885 | 1.544 | 1.704 | 693 | 584 | 638 |
| 1891-1895 . . | 2.388 | 1.910 | 2.138 | 1.704 | 1.326 | 1.504 | 684 | 584 | 634 |
| 1896-1900 . . | 2.187 | 1.661 | 1.912 | 1.565 | 1.132 | 1.337 | 622 | 529 | 575 |
| 1901-1905 . . | 2.007 | 1.497 | 1.739 | 1.442 | 999 | 1.208 | 565 | 498 | 531 |
| 1906-1910 . . | 1.781 | 1.353 | 1.556 | 1.278 | 907 | 1.082 | 503 | 446 | 474 |
| 1911-1915 . . | 1.619 | 1.205 | 1.402 | 1.211 | 849 | 1.020 | 408 | 356 | 382 |
| 1916-1920 . . | 1.804 | 1.210 | 1.493 | 1.411 | 885 | 1.136 | 393 | 325 | 357 |
| 1911 . . . . | 1.645 | 1.280 | 1.452 | 1.206 | 883 | 1.035 | 439 | 397 | 417 |
| 1912 . . . . | 1.551 | 1.180 | 1.356 | 1.169 | 837 | 993 | 382 | 343 | 363 |
| 1913 . . . . | 1.540 | 1.158 | 1.339 | 1.133 | 807 | 961 | 407 | 351 | 378 |
| 1914 . . . . | 1.548 | 1.165 | 1.347 | 1.164 | 839 | 992 | 384 | 326 | 355 |
| 1915 . . . . | 1.889 | 1.241 | 1.549 | 1.452 | 887 | 1.155 | 437 | 354 | 394 |
| 1916 . . . . | 2.032 | 1.239 | 1.619 | 1.600 | 893 | 1.230 | 432 | 346 | 389 |
| 1917 . . . . | 2.334 | 1.314 | 1.801 | 1.860 | 949 | 1.384 | 474 | 365 | 417 |
| 1918 . . . . | 2.518 | 1.378 | 1.924 | 2.052 | 1.037 | 1.522 | 466 | 341 | 402 |
| 1919 . . . . | 1.425 | 1.112 | 1.261 | 1.097 | 824 | 953 | 328 | 288 | 308 |
| 1920 . . . . | 1.268 | 1.000 | 1.128 | 966 | 733 | 843 | 302 | 267 | 285 |
| 1921 . . . . | 1.249 | 1.004 | 1.121 | 965 | 754 | 854 | 284 | 250 | 267 |

Note: For technical convenience, this and certain other tables are bilingual; the English reader, then, should read the comma for the full-stop in the groups of figures running into thousands and the full-stop for the comma in those representing decimals.

DEATH-RATES FROM TUBERCULOSIS FOR ENGLAND AND WALES.
*(Males)*




DEATH-RATES FROM TUBERCULOSIS FOR ENGLAND AND WALES.
*(Females)*



If we study standardised death rates from *meningeal tuberculosis* by decennial periods from 1861 to 1910, we see that for males the rates have declined from 34.5 per 100,000 to 18.9: that is, 45 per cent. In females the rates were respectively 25.3 and 17.2, declining 72 per cent. It must be noticed, however, that in the first decennium males were much more affected than females (34.5 compared with 25.3). In later years the difference between the sexes has diminished.

If we turn to *abdominal tuberculosis* during the same period (including intestinal, peritoneal tuberculosis and tabes mesenterica), we find its rate of reduction comparable with that of meningeal tuberculosis. But here it has been practically equal in both sexes, 39 per cent in males and 40 per cent in females. Greater mortality in males from that cause has been constant throughout the period.

**Tableau II. — Table II.**

MORTALITÉ TUBERCULEUSE DE L'ANGLETERRE ET DU PAYS DE GALLES PAR 100.000 HABITANTS, D'APRÈS L'AGE, LE SEXE ET LES FORMES DE TUBERCULOSE, DE 1851 A 1910.

TUBERCULOSIS MORTALITY OF ENGLAND AND WALES PER 100,000, BY AGES, SEX AND FORMS OF TUBERCULOSIS IN DECENNIA, 1851-1910.

*Decennium* 1851-1860

| Ages | Tuberculose pulmonaire (poumons et larynx) Pulmonary tuberculosis (lungs and larynx) | | | Tuberculose méningo-cérébrale Cerebro-meningeal tuberculosis | | | Tuberculose abdominale (intestinale, peritonéale et tabes mesenterica) Abdominal tuberculosis (intestinal, peritoneal tuberculosis and tabes mesenterica) | | | Tuberculose des autres organes Tuberculosis of the other organs | | | Tuberculose (toutes formes) All forms of tuberculosis | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M. | F. | 2 sexes | M. | F. | 2 sexes | M. | F. | 2 sexes | M. | F. | 2 s. | M. | F. | 2 sexes |
| 0– | 133,3 | 128,7 | 131,0 | | | | | | | | | | 632,3 | 523,2 | |
| 5– | 52,6 | 64,1 | 57,3 | | | | | | | | | | 122,5 | 120,1 | |
| 10– | 76,4 | 129,4 | 102,7 | | | | | | | | | | 110,2 | 159,5 | |
| 15– | 239,8 | 352,3 | 296,4 | | | | | | | | | | 236,6 | 373,1 | |
| 20– | 405,4 | 430,2 | 418,4 | | | | | | | | | | 424,5 | 443,0 | |
| 25– | 402,8 | 458,3 | 431,9 | | | | | | | | | | 416,3 | 469,0 | |
| 35– | 401,6 | 419,7 | 410,9 | | | | | | | | | | 411,9 | 429,3 | |
| 45– | 384,0 | 313,4 | 347,9 | | | | | | | | | | 395,7 | 323,6 | |
| 55– | 334,6 | 239,4 | 285,2 | | | | | | | | | | 347,9 | 252,3 | |
| 65– | 239,4 | 164,0 | 198,9 | | | | | | | | | | 257,3 | 178,3 | |
| 75+ | 92,7 | 71,7 | 80,8 | | | | | | | | | | 106,1 | 83,4 | |
| Taux standardisé de mortalité Standardised death rate | 269,4 | 285,4 | 277,2 | | | | | | | | | | 347,7 | 348,3 | |

*Decennium* 1861-1870

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0– | 99,4 | 95,1 | 97,3 | 258,9 | 185,5 | 222.3 | 200,1 | 172,5 | 186,4 | 43,4 | 38,6 | 40,9 | 601,8 | 491,7 | 546,9 |
| 5– | 43,3 | 47,9 | 45,6 | 32,8 | 25,7 | 29,2 | 15,5 | 12,5 | 14,0 | 11,3 | 7,8 | 9,6 | 102,9 | 93,9 | 98,4 |
| 10– | 60,8 | 105,0 | 82,8 | 9,3 | 8,6 | 9,0 | 8,0 | 8,2 | 8,1 | 11,8 | 8,2 | 9,9 | 89,9 | 130,0 | 109,8 |
| 15– | 219,6 | 312,1 | 266,2 | 2,0 | 2,2 | 2,1 | 4,9 | 7,0 | 6,0 | 11,7 | 8,7 | 10,2 | 238,2 | 330,0 | 284,5 |
| 20– | 389,4 | 297,2 | 393,5 | 0,9 | 0,8 | 0,8 | 3,4 | 4,3 | 3,8 | 9,4 | 6,4 | 7,9 | 403,1 | 408,7 | 406,0 |
| 25– | 411,1 | 439,5 | 426,0 | 0,5 | 0,4 | 0,5 | 1,9 | 3,4 | 2,7 | 7,1 | 4,9 | 5,9 | 420,6 | 448,2 | 435,1 |
| 35– | 417,0 | 390,9 | 403,5 | 0,3 | 0,3 | 0,3 | 1,6 | 2,5 | 2,1 | 5,5 | 5,1 | 5,2 | 424,4 | 398,8 | 411,1 |
| 45– | 388,0 | 286,7 | 335,7 | 0,2 | 0,2 | 0,2 | 2,0 | 2,6 | 2,3 | 6,7 | 5,9 | 6,4 | 396,9 | 295,4 | 344,6 |
| 55– | 331,2 | 207,5 | 266,9 | 0,2 | 0,2 | 0,2 | 2,6 | 2,8 | 2,7 | 9,3 | 7,3 | 8,2 | 343,3 | 217,8 | 278,0 |
| 65– | 203,7 | 124,6 | 161,2 | 0,3 | 0,2 | 0,3 | 1,9 | 2,1 | 2,0 | 11,5 | 8,5 | 9,9 | 217,4 | 135,4 | 173,4 |
| 75+ | 66,3 | 44,8 | 54,2 | 0,2 | 0,1 | 0,1 | 0,6 | 0,6 | 0,6 | 6,9 | 7,3 | 7,1 | 74,0 | 52,8 | 62,0 |
| Taux standardisé de mortalité Standardised death rate | 261,2 | 257,8 | 259,0 | 34,5 | 25,3 | 29,9 | 27,1 | 24,3 | 25,7 | 12,9 | 10,3 | 11,7 | 335,7 | 317,7 | 326,3 |

*Decennium* 1871-1880

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0– | 78,7 | 75,3 | 77,0 | 225,1 | 156,5 | 190,8 | 220,7 | 186,5 | 203,6 | 55,3 | 48,0 | 51,6 | 579,8 | 466,3 | 523,0 |
| 5– | 34,2 | 37,7 | 36,0 | 33,3 | 27,3 | 30,3 | 14,2 | 11,7 | 13,0 | 8,3 | 6,3 | 7,2 | 90,0 | 83,0 | 86,5 |
| 10– | 48,3 | 85,1 | 66,6 | 12,0 | 11,7 | 11,8 | 7,7 | 8,0 | 7,9 | 6,8 | 5,1 | 6,0 | 74,8 | 109,9 | 92,3 |
| 15– | 168,5 | 240,9 | 204,9 | 4,8 | 4,9 | 4,9 | 5,2 | 6,8 | 6,0 | 7,2 | 5,1 | 6,1 | 185,7 | 257,7 | 221,9 |
| 20– | 310,9 | 315,4 | 313,3 | 2,6 | 2,3 | 2,4 | 3,2 | 4,2 | 3,7 | 5,2 | 3,4 | 4,3 | 321,9 | 325,3 | 323,7 |
| 25– | 371,3 | 355,6 | 363,1 | 1,7 | 1,5 | 1,6 | 1,8 | 3,3 | 2,6 | 3,7 | 2,7 | 3,2 | 378,5 | 363,1 | 370,5 |
| 35– | 413,7 | 341,2 | 376,0 | 1,2 | 1,0 | 1,1 | 1,9 | 2,5 | 2,2 | 3,0 | 2,8 | 2,9 | 419,8 | 347,5 | 382,2 |
| 45– | 386,5 | 246,8 | 313,7 | 0,6 | 0,5 | 0,5 | 1,8 | 2,5 | 2,1 | 3,9 | 3,7 | 3,9 | 392,8 | 253,5 | 320,2 |
| 55– | 320,6 | 178,6 | 245,9 | 0,4 | 0,4 | 0,4 | 2,1 | 2,6 | 2,3 | 5,4 | 5,0 | 5,3 | 328,5 | 186,6 | 253,9 |
| 65– | 192,8 | 109,7 | 148,0 | 0,2 | 0,3 | 0,2 | 2,2 | 2,6 | 2,4 | 7,3 | 6,7 | 7,0 | 202,5 | 119,3 | 157,6 |
| 75+ | 60,4 | 40,7 | 49,3 | 0,1 | 0,1 | 0,1 | 0,8 | 0,9 | 0,9 | 3,7 | 3,5 | 3,5 | 65,0 | 45,2 | 53,8 |
| Taux standardisé de mortalité Standardised death rate | 235,9 | 211,9 | 223,1 | 31,8 | 23,2 | 27,5 | 29,3 | 25,8 | 27,5 | 11,0 | 9,2 | 10,1 | 308,0 | 270,1 | 288,2 |

**Tableau II** *(suite)*. — **Table II** *(continued)*.

MORTALITÉ TUBERCULEUSE DE L'ANGLETERRE ET DU PAYS DE GALLES PAR 100.000 HABITANTS, D'APRÈS L'AGE, LE SEXE ET LES FORMES DE TUBERCULOSE, DE 1851 A 1910.

TUBERCULOSIS MORTALITY OF ENGLAND AND WALES PER 100,000, BY AGES, SEX AND FORMS OF TUBERCULOSIS IN DECENNIA, 1851-1910.

*Decennium* 1881-1890.

| Ages | Tuberculose pulmonaire (poumons et larynx) Pulmonary tuberculosis (lungs and larynx) | | | Tuberculose méningo-cérébrale Cerebro-meningeal tuberculosis | | | Tuberculose abdominale (intestinale, peritonéale et tabes mesenterica) Abdominal tuberculosis (intestinal, peritoneal tuberculosis and tabes mesenterica) | | | Tuberculose des autres organes Tuberculosis of the other organs | | | Tuberculose (toutes formes) All forms of tuberculosis | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M. | F. | 2 sexes | M. | F. | 2 sexes | M. | F. | 2 sexes | M. | F. | 2 s. | M. | F. | 2 sexes |
| 0– | 55,3 | 51,8 | 53,5 | 168,8 | 122,5 | 145,6 | 200,5 | 161,2 | 180,8 | 75,8 | 63,3 | 69,5 | 500,4 | 398,7 | 449,4 |
| 5– | 25,4 | 32,8 | 29,1 | 31,9 | 29,5 | 30,7 | 12,1 | 12,2 | 12,1 | 12,3 | 12,9 | 12,7 | 81,7 | 87,4 | 84,6 |
| 10– | 34,4 | 70,2 | 52,3 | 11,5 | 12,8 | 12,1 | 6,7 | 8,4 | 7,5 | 10,4 | 11,6 | 11,1 | 63,0 | 103,0 | 83,0 |
| 15– | 129,3 | 180,9 | 155,2 | 5,5 | 6,1 | 5,8 | 4,7 | 6,4 | 5,6 | 11,5 | 11,8 | 11,7 | 151,0 | 205,2 | 178,3 |
| 20– | 234,1 | 232,6 | 233,3 | 3,3 | 3,1 | 3,2 | 3,3 | 4,5 | 3,9 | 10,9 | 9,3 | 10,1 | 251,6 | 249,5 | 250,5 |
| 25– | 303,7 | 280,1 | 291,4 | 2,1 | 1,9 | 2,0 | 2,3 | 3,5 | 2,9 | 8,3 | 7,7 | 8,0 | 316,4 | 293,2 | 304,3 |
| 35– | 357,7 | 274,0 | 314,4 | 1,2 | 1,2 | 1,2 | 2,0 | 2,9 | 2,5 | 7,6 | 6,5 | 7,0 | 368,5 | 284,6 | 325,1 |
| 45– | 350,5 | 206,2 | 274,9 | 1,0 | 0,6 | 0,8 | 1,9 | 2,6 | 2,2 | 7,7 | 5,2 | 6,5 | 361,1 | 214,6 | 284,4 |
| 55– | 292,0 | 151,5 | 217,3 | 0,4 | 0,3 | 0,3 | 2,4 | 2,4 | 2,4 | 7,9 | 5,5 | 6,7 | 302,7 | 159,7 | 226,7 |
| 65– | 182,3 | 98,0 | 136,2 | 0,2 | 0,2 | 0,2 | 2,1 | 2,5 | 2,3 | 6,7 | 5,1 | 5,9 | 191,3 | 105,8 | 144,6 |
| 75+ | 69,0 | 39,8 | 52,3 | 0,2 | — | 0,1 | 1,0 | 1,2 | 1,1 | 3,0 | 4,2 | 3,7 | 73,2 | 45,2 | 57,2 |
| Taux standardisé de mortalité / Standardised death rate | 196,6 | 161,2 | 181,0 | 25,4 | 19,9 | 22,6 | 26,7 | 23,1 | 24,9 | 16,9 | 14,9 | 15,9 | 265,6 | 225,1 | 244,4 |

*Decennium* 1891-1900.

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0– | 44,1 | 38,5 | 41,3 | 148,1 | 116,1 | 132,0 | 161,3 | 130,4 | 145,8 | 81,2 | 66,6 | 73,9 | 434,7 | 351,6 | 393,0 |
| 5– | 17,4 | 23,9 | 20,6 | 28,3 | 26,9 | 27,6 | 10,2 | 10,4 | 10,3 | 14,6 | 13,2 | 13,9 | 70,5 | 74,4 | 72,4 |
| 10– | 23,4 | 50,2 | 36,8 | 11,0 | 12,0 | 11,5 | 6,2 | 7,4 | 6,8 | 11,5 | 12,2 | 11,8 | 52,1 | 81,8 | 66,9 |
| 15– | 99,5 | 129,0 | 114,4 | 6,0 | 6,3 | 6,1 | 4,9 | 6,6 | 5,7 | 13,0 | 13,6 | 13,4 | 123,4 | 155,5 | 139,6 |
| 20– | 188,7 | 159,1 | 173,0 | 3,7 | 3,7 | 3,7 | 3,8 | 5,3 | 4,6 | 14,0 | 10,7 | 12,3 | 210,2 | 178,8 | 193,6 |
| 25– | 236,9 | 192,3 | 213,5 | 2,5 | 2,4 | 2,4 | 3,0 | 4,5 | 3,8 | 11,7 | 9,4 | 10,5 | 254,1 | 208,6 | 230,2 |
| 35– | 309,5 | 212,1 | 259,2 | 1,8 | 1,4 | 1,6 | 2,6 | 4,1 | 3,4 | 11,2 | 8,8 | 10,0 | 325,1 | 226,4 | 274,2 |
| 45– | 314,4 | 164,2 | 236,2 | 1,1 | 0,9 | 1,0 | 2,9 | 3,1 | 3,0 | 11,2 | 7,1 | 9,0 | 329,6 | 175,3 | 249,2 |
| 55– | 261,8 | 123,9 | 188,1 | 0,7 | 0,5 | 0,6 | 2,7 | 2,6 | 2,7 | 11,6 | 7,4 | 9,3 | 276,8 | 134,4 | 200,7 |
| 65– | 158,4 | 80,7 | 115,4 | 0,3 | 0,3 | 0,3 | 2,2 | 2,0 | 2,1 | 9,7 | 7,6 | 8,5 | 170,6 | 90,6 | 126,3 |
| 75+ | 55,6 | 35,2 | 43,7 | 0,1 | 0,0 | 0,1 | 1,2 | 0,8 | 0,9 | 6,0 | 6,7 | 6,5 | 62,9 | 42,7 | 51,2 |
| Taux standardisé de mortalité / Standardised death rate | 163,3 | 122,6 | 141,8 | 22,8 | 19,1 | 21,0 | 22,3 | 19,7 | 21,0 | 20,1 | 16,6 | 18,3 | 228,5 | 178,0 | 202,1 |

*Decennium* 1901-1910

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0– | 35,1 | 30,4 | 32,7 | 113,4 | 99,1 | 106,3 | 103,4 | 82,6 | 93,0 | 61,0 | 51,5 | 56,3 | 312,9 | 263,6 | 288,3 |
| 5– | 13,7 | 19,4 | 16,6 | 26,8 | 26,6 | 26,7 | 10,1 | 11,0 | 10,5 | 13,0 | 12,8 | 12,9 | 63,6 | 69,8 | 66,7 |
| 10– | 17,1 | 39,6 | 28,3 | 11,4 | 12,5 | 11,9 | 6,6 | 7,5 | 7,1 | 11,2 | 11,4 | 11,3 | 46,3 | 71,0 | 58,6 |
| 15– | 75,6 | 98,8 | 87,3 | 6,4 | 6,8 | 6,6 | 4,8 | 6,6 | 5,8 | 12,9 | 12,8 | 12,8 | 99,7 | 125,0 | 112,5 |
| 20– | 152,1 | 123,5 | 137,0 | 3,9 | 3,8 | 3,8 | 4,1 | 5,0 | 4,6 | 14,3 | 10,2 | 12,2 | 174,4 | 142,5 | 157,6 |
| 25– | 196,6 | 147,5 | 170,8 | 2,7 | 2,3 | 2,5 | 3,3 | 5,1 | 4,3 | 13,2 | 10,2 | 11,6 | 215,8 | 165,1 | 189,2 |
| 35– | 244,6 | 155,1 | 198,3 | 2,0 | 1,7 | 1,8 | 3,3 | 4,4 | 3,8 | 12,3 | 9,8 | 11,1 | 262,2 | 171,0 | 215,0 |
| 45– | 275,3 | 131,0 | 200,4 | 1,4 | 1,1 | 1,3 | 3,4 | 3,7 | 3,5 | 13,3 | 9,1 | 11,1 | 293,4 | 144,9 | 216,3 |
| 55– | 237,9 | 104,7 | 167,3 | 0,8 | 0,6 | 0,7 | 3,8 | 3,0 | 3,4 | 14,9 | 10,3 | 12,4 | 257,4 | 118,6 | 183,8 |
| 65– | 152,1 | 75,6 | 109,5 | 0,5 | 0,2 | 0,3 | 2,6 | 2,1 | 2,3 | 13,4 | 11,5 | 12,4 | 168,6 | 89,4 | 124,5 |
| 75+ | 56,7 | 35,7 | 44,2 | 0,1 | 0,2 | 0,1 | 1,0 | 1,2 | 1,1 | 9,0 | 12,3 | 11,1 | 66,8 | 49,4 | 56,5 |
| Taux standardisé de mortalité / Standardised death rate | 135,8 | 95,1 | 114,3 | 18,9 | 17,2 | 18,1 | 16,0 | 14,5 | 15,3 | 18,4 | 15,6 | 16,9 | 189,1 | 142,4 | 164,6 |

From 1861 to 1910, pulmonary tuberculosis decreased in females more than in males (63 per cent as against 48 per cent). Tuberculous meningitis declined, on the other hand, more in males than in females (45 per cent as against 32 per cent). Both sexes declined equally for tuberculous peritonitis (41 per cent).

## TUBERCULOSIS DECLINE BY AGES.

There has been a decline at all ages, but it has been more important in infancy and in early middle-age in both sexes. It was least noticeable in childhood from age 5 to 15, and in later

ages 75 and over. If we compare the decline in adult life in both sexes, we see that among females the decline is larger than in males; but that in late adult life (ages 35-55) this sexual difference is still more accentuated, little decline being noticed in the male rates of these ages. The maximum rate in females during the first decennium was at age 25-35, but it shifted gradually to age 35-45. During the decennium 1911-1920, the rate from age 20 to 55 was practically constant. In males there was also a shifting of the maximum mortality of tuberculosis from age 35-45 to 45-55, because of the sharper decline in early adult life.

If we plot the death-rates by ages we see: first a sharp drop from the comparatively high infant death-rate into the low childhood rates; then a gradual ascent, from age 15 onward, reaching a maximum at age 35 in females and 50 in males. From age 55 to 80 there is a gradual descent in both sexes.

### Tuberculosis Decline by Sexes.

During the decennium 1851-1860, the rates for tuberculosis (all forms) for both sexes were practically equal; since, the female rates have declined faster than the male and the mutual differences have consequently increased. The differences were highest during the war, reaching the maximum in 1917 when the male rate was 45 per cent higher than the female. After the war this difference was decreased to 20 per cent. At present the difference between both sexes for pulmonary tuberculosis is the same as for all forms of the disease. On the other hand, the non-pulmonary tuberculosis rates have been, since 1851, consistently higher in males than in females owing to the greater mortality of male infants from meningeal and abdominal tuberculosis.

### Tuberculosis Mortality during the War.

The increase in tuberculosis mortality began in 1915, reached its peak in 1918 (the rate was then 38 per cent in males and 15 per cent in females higher than in 1914), and declined immediately thereafter, reaching the pre-war level in 1919 in both sexes. This war increase did not affect at all the children under 5 years of age, it affected but slightly those between 5 and 10, and a little more those between 10 and 15. It affected mainly the adult population of 15 to 45. Its effect was practically nil at ages above 55. In females the greatest increase was present in the age groups of 15 to 25 and 25 to 35.

In order to appreciate justly the meaning of this war increase in England, it must be borne in mind that the male rates of mortality were computed on the civilian population — that is to say, on a comparatively unfit population. There was also a very marked increase in the industrial employment of young women during the same period.

**Tableau III. — Table III.**

Mortalité tuberculeuse totale pour l'Angleterre et le Pays de Galles par 100.000 habitants, d'après l'age et le sexe, par années, de 1911 a 1922.

Mortality from All Forms of Tuberculosis for England and Wales per 100,000, by Ages and Sex, by Years from 1911 to 1922.

*Hommes — Males*

| Age | 1911 | 1912 | 1913 | 1914 | 1915* | 1916 | 1917 | 1918 | 1919 | 1920 | 1921 | 1922† |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0– | 247,5 | 194,7 | 217,9 | 197,7 | 205,3 | 183,0 | 191,5 | 174,1 | 137,7 | 142,7 | 125,0 | 123,0 |
| 5– | 60,7 | 55,7 | 59,5 | 54,7 | 61,6 | 61,6 | 66,2 | 63,2 | 46,3 | 39,2 | 38,7 | 37,9 |
| 10– | 44,5 | 42,5 | 44,0 | 46,1 | 52,9 | 57,1 | 57,3 | 61,1 | 45,5 | ? | 34,2 | 36,1 |
| 15– | 100,7 | 92,0 | 89,4 | 96,7 | 133,2 | ? | ? | ? | ? | ? | ? | 91,3 |
| 20– | 158,0 | 148,6 | 144,2 | 150,6 | 265,9 | ? | ? | ? | ? | ? | ? | 165,1 |
| 25– | 174,7 | 170,3 | 158,0 | 161,1 | 245,3 | ? | ? | ? | ? | ? | ? | 157,7 |
| 30– | 201,7 | 196,0 | 190,5 | 190,9 | | | | | | | | |
| 35– | 219,9 | 216,0 | 212,0 | 218,8 | 269,8 | ? | ? | ? | ? | ? | ? | 181,1 |
| 40– | 236,6 | 231,2 | 230,7 | 235,2 | | | | | | | | |
| 15–45 | | | | | 234,5 | 266,5 | 324,0 | 368,1 | 169,6 | 146,8 | 147,6 | 183,5 |
| 45– | 237,4 | 248,1 | 239,1 | 239,9 | 254,7 | 253,1 | 259,0 | 259,2 | 218,3 | 204,3 | 205,9 | 160,0 |
| 50– | 256,2 | 239,1 | 240,0 | 256,8 | | | | | | | | |
| 55– | 238,9 | 243,0 | 224,6 | 238,5 | 227,3 | 226,5 | 231,6 | 219,2 | 187,9 | 165.7 | 164,9 | 106,9 |
| 60– | 226,1 | 226,7 | 215,0 | 216,5 | | | | | | | | |
| 65– | 179,9 | 165,9 | 163,0 | 156,9 | 141,1 | 152,9 | 154,0 | 148,4 | 130,0 | 112,1 | 104,4 | 46,6 |
| 70– | 126,3 | 113,1 | 113,3 | 108,1 | | | | | | | | |
| 75– | 68,8 | 68,0 | 72,0 | 75,2 | 63,8 | 77,1 | 64,9 | 74,0 | 57,3 | 52,1 | 44,4 | 11,7 |
| 80– | 58,3 | 50,7 | 50,8 | 46,8 | | | | | | | | |
| 85+ | 30,7 | 30,4 | 34,8 | 12,9 | 8,5 | 34,4 | 52,7 | 29,5 | 12,6 | 40,0 | 31,2 | |

* En 1915, un nouveau groupement d'âges fut adopté pour les âges dépassant 25 ans, 25-34, 35-44, etc. Le détail de la population masculine manquant à cause de la guerre, le taux global 15-45 fut adopté, suivi de groupes d'âge de 10 ans.

* Since 1915, a new age-grouping was adopted: from age 25 onward, 25-34, 35-44, etc. Owing to war conditions, male population by ages was not available, and computations were made on the age group 15-45 and ten-year groups thereafter.

† En 1922, les âges au-dessus de 75 ans furent réunis en un seul groupe.

† In 1922, all ages above 75 were merged into one group.

**Tableau III** *(suite)*. — **Table III** *(continued)*.

MORTALITÉ TUBERCULEUSE TOTALE POUR L'ANGLETERRE ET LE PAYS DE GALLES PAR 100.000 HABITANTS, D'APRÈS L'AGE ET LE SEXE, PAR ANNÉES, DE 1911 A 1922.

MORTALITY FROM ALL FORMS OF TUBERCULOSIS FOR ENGLAND AND WALES PER 100,000, BY AGE AND SEX, BY YEARS FROM 1911 TO 1922.

*Femmes — Females*

| Age | 1911 | 1912 | 1913 | 1914 | 1915 * | 1916 | 1917 | 1918 | 1919 | 1920 | 1921 | 1922 † |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0– | 211,7 | 169,6 | 175,6 | 156,9 | 170,3 | 151,1 | 163,1 | 141,7 | 119,3 | 109,7 | 104,2 | 103,3 |
| 5– | 66,8 | 54,4 | 59,0 | 58,2 | 61,0 | 66,2 | 69,4 | 68,2 | 50,7 | 43,7 | 39,3 | 39,6 |
| 10– | 71,3 | 65,7 | 68,4 | 71,4 | 74,9 | 77,6 | 89,2 | 92,0 | 68,3 | 58,3 | 54,2 | 53,9 |
| 15– | 125,3 | 123,6 | 119,4 | 121,2 | 138,7 | 146,9 | 171,9 | 178,9 | 144,5 | 130,0 | 138,4 | 127,5 |
| 20– | 138,6 | 134,8 | 129,3 | 133,9 | 137,2 | 152,7 | 164,3 | 188,8 | 151,8 | 141,8 | 157,8 | 158,7 |
| 25– | 148,6 | 137,2 | 133,5 | 135,1 | 142,6 | 142,9 | 148,9 | 172,3 | 135,4 | 125,1 | 127,8 | 128,7 |
| 30– | 151,1 | 142,7 | 136,0 | 137,5 | | | | | | | | |
| 35– | 154,9 | 149,0 | 138,4 | 142,4 | 152,4 | 151,9 | 152,3 | 161,3 | 128,5 | 113,8 | 110,4 | 108,8 |
| 40– | 144,0 | 135,1 | 134,7 | 142,2 | | | | | | | | |
| 15–45 | | | | | 143,6 | 148,0 | 157,0 | 173,3 | 138,0 | 125,6 | 129,8 | 85,9 |
| 45– | 132,6 | 128,6 | 122,6 | 129,2 | 129,8 | 121,2 | 124,9 | 132,1 | 109,3 | 96,8 | 92,6 | 72,9 |
| 50– | 114,3 | 108,8 | 111,1 | 121,0 | | | | | | | | |
| 55– | 111,8 | 104,6 | 101,1 | 100,3 | 104,2 | 102,9 | 101,8 | 105,0 | 93,5 | 78,0 | 77,8 | 65,7 |
| 60– | 111,0 | 100,4 | 93,8 | 101,5 | | | | | | | | |
| 65– | 97,3 | 86,5 | 77,2 | 79,6 | 81,4 | 76,6 | 79,8 | 79,1 | 74,0 | 67,5 | 61,7 | 40,9 |
| 70– | 71,5 | 73,4 | 70,1 | 68,2 | | | | | | | | |
| 75– | 46,5 | 61,6 | 47,1 | 52,0 | 55,2 | 52,9 | 49,0 | 46,4 | 52,5 | 42,1 | 46,3 | 23,0 |
| 80– | 44,4 | 35,9 | 37,1 | 51,3 | | | | | | | | |
| 85+ | 24,1 | 31,0 | 21,5 | 21,3 | 25,6 | 40,1 | 21,8 | 23,3 | 33,2 | 27,7 | 25,0 | |

*Les deux sexes — Both Sexes*

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0– | 229,7 | 182,2 | 196,9 | 177,4 | 187,9 | 167,2 | 177,4 | 158,0 | 128,6 | 128,3 | 114,8 | 113,3 |
| 5– | 63,7 | 55,0 | 59,2 | 56,5 | 61,3 | 63,9 | 67,8 | 65,7 | 48,5 | 43,2 | 39,0 | 38,8 |
| 10– | 57,9 | 54,1 | 56,2 | 58,8 | 63,9 | 67,4 | 73,3 | 76,6 | 56,9 | 48,7 | 44,2 | 44,9 |
| 15– | 113,1 | 107,9 | 104,5 | 109,0 | 136,4 | ? | ? | ? | ? | ? | ? | 109,5 |
| 20– | 147,8 | 141,3 | 136,4 | 141,8 | 179,3 | ? | ? | ? | ? | ? | ? | 161,7 |
| 25– | 161,0 | 152,8 | 145,1 | 147,4 | 182,8 | ? | ? | ? | ? | ? | ? | 141,9 |
| 30– | 175,3 | 168,2 | 162,1 | 163,0 | | | | | | | | |
| 35– | 186,3 | 181,3 | 173,9 | 179,3 | 206,1 | ? | ? | ? | ? | ? | ? | 142,4 |
| 40– | 188,5 | 181,4 | 180,9 | 187,0 | | | | | | | | |
| 15–45 | | | | | 180,5 | 191,0 | 210,4 | 232,8 | 152,1 | 135,4 | 138,0 | 132,9 |
| 45– | 183,0 | 186,1 | 178,7 | 182,4 | 190,6 | 185,1 | 189,2 | 192,4 | 160,7 | 147,2 | 145,5 | 114,3 |
| 50– | 182,3 | 171,3 | 172,9 | 186,1 | | | | | | | | |
| 55– | 172,2 | 170,5 | 159,8 | 166,0 | 164,4 | 163,2 | 164,9 | 160,4 | 132,3 | 120,6 | 119,9 | 84,1 |
| 60– | 164,8 | 159,5 | 150,5 | 155,3 | | | | | | | | |
| 65– | 134,7 | 122,5 | 116,1 | 114,6 | 107,8 | 110,5 | 112,9 | 110,2 | 99,2 | 87,6 | 81,3 | 43,1 |
| 70– | 95,0 | 90,4 | 88,6 | 85,3 | | | | | | | | |
| 75– | 55,7 | 64,2 | 57,4 | 61,5 | 58,7 | 62,5 | 55,4 | 57,4 | 54,4 | 46,1 | 45,5 | 19,3 |
| 80– | 49,8 | 41,7 | 42,5 | 49,5 | | | | | | | | |
| 85+ | 26,5 | 30,8 | 26,2 | 18,3 | 19,5 | 38,1 | 32,8 | 25,5 | 25,8 | 32,2 | 27,3 | |

## 2. Tuberculosis Statistics of Scotland.

*Sources.* — The tuberculosis statistics included in this report have been extracted from Sir Robert Philip's report to the International Tuberculosis Congress in Lausanne, 1924.

*Tuberculosis (all forms)* in both sexes declined markedly and continuously from 373 per 100,000 in 1871 to 122 in 1921, a fall of 77 per cent. If we consider the sexes separately, we see that the decline has been slightly larger in females than in males, 69 and 64 per cent respectively.

*Mortality from tuberculosis of the lungs* for both sexes decreased from 261 per 100,000 to 84 — a drop of 68 per cent, the decline being larger again among females. The rate of decrease by decennia was largest for tuberculosis (all forms) in both sexes during the period 1911-1921, the same being true for pulmonary tuberculosis.

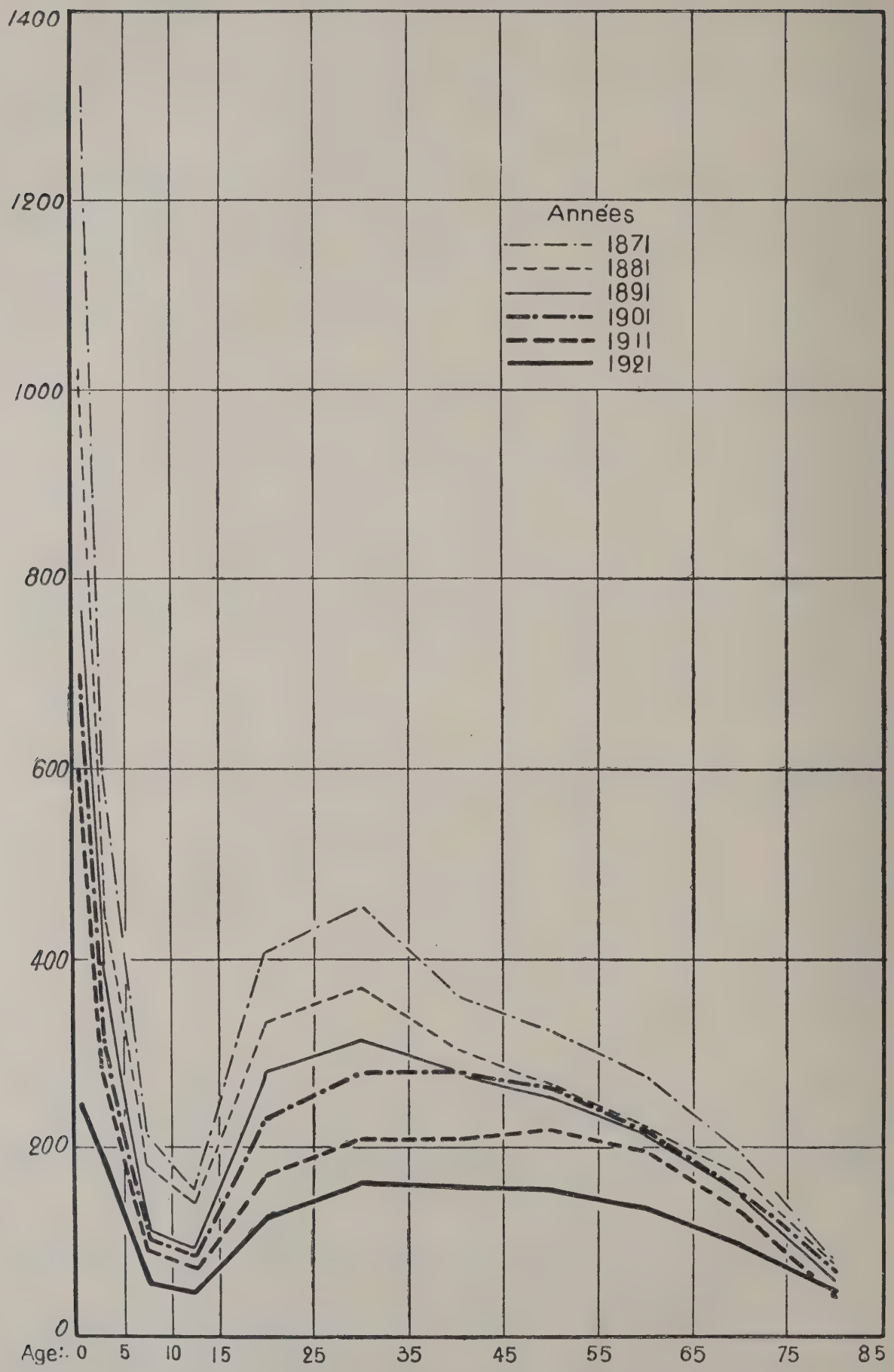
A very interesting phenomenon is displayed by the yearly rates of pulmonary tuberculosis in males and females. The female exceeds the male from the beginning of 1869 until 1896 (inclusive), with the exception of a single year — 1892. From 1897 onwards the difference is reversed and the male rates constantly exceed the female (by 15 per cent in 1923).

In the other forms the male rates remain constantly higher than the female.

* and †. See notes on preceding page.

DEATH-RATES FROM TUBERCULOSIS FOR SCOTLAND.

*(Females)*



DEATH-RATES FROM TUBERCULOSIS FOR SCOTLAND.

*(Males)*

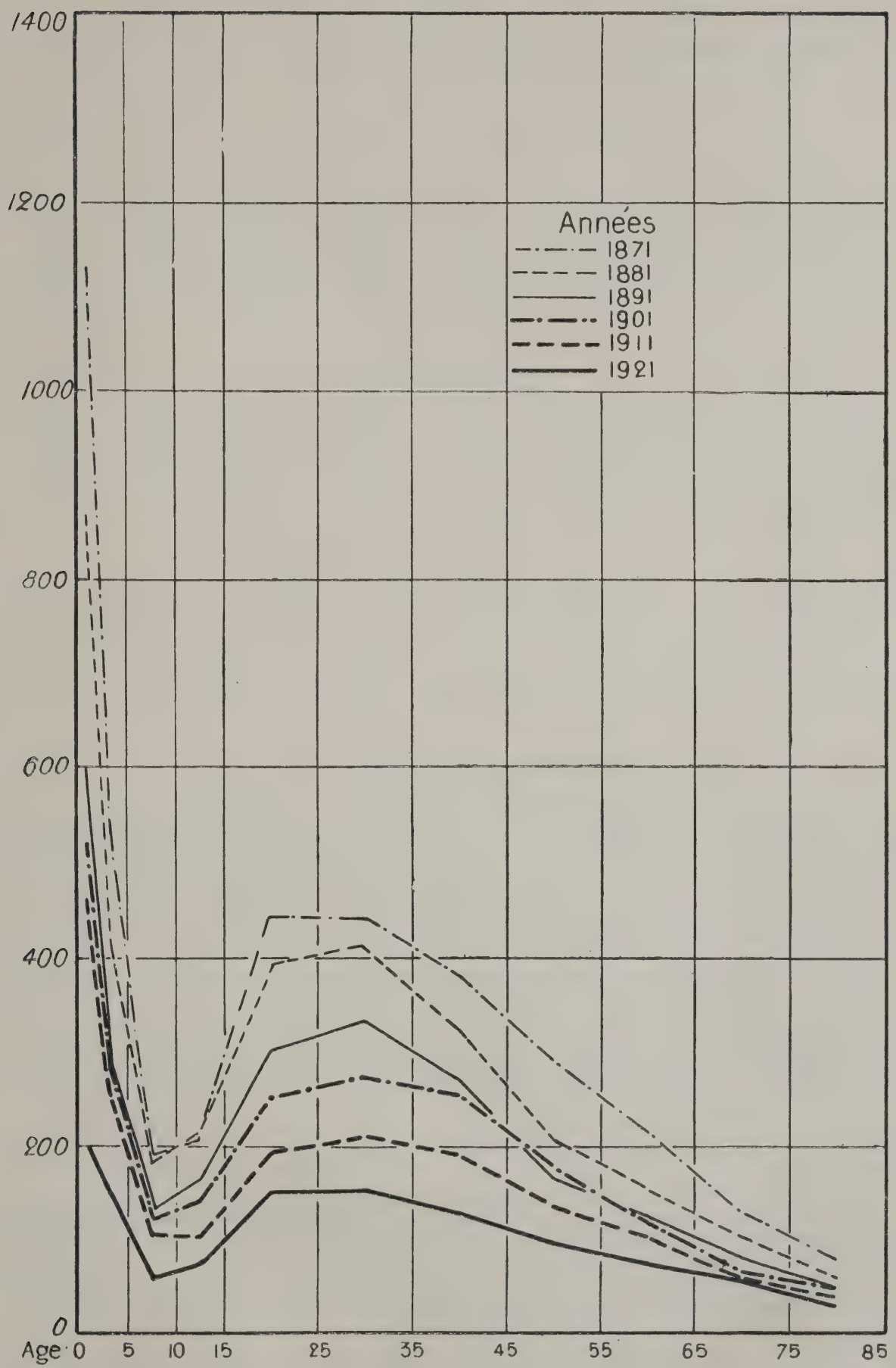


**Table I.**

DEATH RATES FROM TUBERCULOSIS AND PULMONARY TUBERCULOSIS.

(Numbers are five-yearly means centring on the year named.)

*Rates per* 100,000.

| Year | Tuberculosis | | | Pulmonary Tuberculosis | | |
|---|---|---|---|---|---|---|
| | Both sexes | Males | Females | Both sexes | Males | Females |
| 1871 . . . . . | 373 | 381 | 366 | 261 | 252 | 269 |
| 1881 . . . . . | 311 | 310 | 311 | 217 | 206 | 227 |
| 1891 . . . . . | 245 | 250 | 240 | 178 | 176 | 179 |
| 1901 . . . . . | 224 | 233 | 214 | 155 | 158 | 151 |
| 1911 . . . . . | 178 | 187 | 169 | 115 | 120 | 110 |
| 1921 . . . . . | 122 | 129 | 115 | 84 | 88 | 80 |
| *Comparison with* 1871. | | | | | | |
| 1871 . . . . . | 100 | 100 | 100 | 100 | 100 | 100 |
| 1881 . . . . . | 83 | 81 | 85 | 83 | 82 | 84 |
| 1891 . . . . . | 66 | 66 | 66 | 68 | 70 | 67 |
| 1901 . . . . . | 60 | 61 | 58 | 59 | 63 | 56 |
| 1911 . . . . . | 48 | 49 | 46 | 44 | 48 | 41 |
| 1921 . . . . . | 33 | 34 | 31 | 32 | 35 | 30 |
| *Percentage Decrease of Rate — Decennial.* | | | | | | |
| 1871-1881 . . . . . | 17 | 19 | 15 | 17 | 18 | 16 |
| 1881-1891 . . . . . | 21 | 19 | 23 | 18 | 15 | 21 |
| 1891-1901 . . . . . | 9 | 7 | 11 | 13 | 10 | 16 |
| 1901-1911 . . . . . | 21 | 20 | 21 | 26 | 24 | 27 |
| 1911-1921 . . . . . | 31 | 31 | 32 | 27 | 27 | 27 |

## TUBERCULOSIS DURING THE WAR.

If one considers the rates for tuberculosis as a whole, one sees no distinct increase in the rates of either sex, but if one analyses the component parts of this total rate, one sees that it is due to a neutralisation of an actual increase in pulmonary tuberculosis by the continued decrease in meningeal and abdominal tuberculosis. Tuberculosis of the other organs has been meanwhile practically stationary.

The retardation of the decline in total and pulmonary tuberculosis was made up by a sudden drop in 1919, and then the pre-war trend was resumed.

Meningeal and abdominal tuberculosis are the only forms, together with pulmonary tuberculosis, to be given separately, tuberculosis of all other organs being included under a single heading "Other Tuberculosis".

On the whole, each of these three groups, both for males and females, shows a definite decline during the period studied.

Tuberculosis meningitis declined among males from 68 per 100,000 in 1869 to 15 in 1923, a decline of 78 per cent, while among females it declined from 49 to 12 (76 per cent).

## MORTALITY BY AGES.

*Males.*

During the period 1871-1921, a steady decrease is indicated by the decennial mortality figures. With increasing age, the decline in the tuberculosis mortality becomes smaller and smaller, reaching its minimum at the age of 75 years and over, and its maximum in the first year of life. The only exception is furnished by the age group 1-4 years.

The decennial percentage decrease of rate from 1871 to 1921 in all age groups, except 75 and over, has been largest in the last decennium.

*Females.*

During the stated period, a similar decline has been felt among females, this decrease being largest in the age groups 0-1, 1-4, 5-9, 45-54 years. Next in order come the three age groups included between 15 and 39 years, each showing the same rate of decrease; followed by the age groups 55-64, and 75 years and over. The minimum decline lies in age group 65-74 years.

With the exception of the age groups 15-24 years, the largest decennial decrease percentage of all ages is shown in the last decennium.

**Table II.**

DEATH RATES FROM PULMONARY TUBERCULOSIS IN AGE GROUPS.

(Numbers are five-yearly means centring on the year named.)

| Year | All ages | –1 | 1– | 5– | 15– | 25– | 35– | 45– | 45– | 55– | 65– | 75– |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MALES. | | | | | | | | | | | | |
| *Rates per* 100,000. | | | | | | | | | | | | |
| 1871 | 381 | 1355 | 596 | 214 | 156 | 409 | 453 | 364 | 326 | 275 | 194 | 83 |
| 1881 | 310 | 1023 | 459 | 183 | 145 | 334 | 367 | 305 | 266 | 220 | 170 | 78 |
| 1891 | 250 | 766 | 331 | 116 | 96 | 281 | 314 | 284 | 254 | 215 | 150 | 57 |
| 1901 | 233 | 702 | 321 | 105 | 89 | 231 | 280 | 281 | 263 | 217 | 150 | 68 |
| 1911 | 187 | 602 | 284 | 92 | 73 | 172 | 211 | 211 | 218 | 198 | 132 | 41 |
| 1921 | 129 | 248 | 186 | 57 | 47 | 125 | 163 | 158 | 154 | 136 | 95 | 48 |
| *Comparison with* 1871. | | | | | | | | | | | | |
| 1871 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1881 | 81 | 75 | 77 | 86 | 93 | 82 | 81 | 84 | 82 | 80 | 88 | 94 |
| 1891 | 66 | 56 | 56 | 54 | 62 | 69 | 69 | 78 | 78 | 78 | 77 | 69 |
| 1901 | 61 | 52 | 54 | 49 | 57 | 56 | 62 | 77 | 81 | 79 | 77 | 82 |
| 1911 | 49 | 44 | 48 | 43 | 47 | 42 | 47 | 58 | 67 | 72 | 68 | 51 |
| 1921 | 34 | 18 | 31 | 27 | 30 | 31 | 36 | 43 | 47 | 49 | 49 | 58 |
| *Percentage Decrease of Rate — Decennial.* | | | | | | | | | | | | |
| 1871-1881 | 19 | 25 | 23 | 14 | 7 | 18 | 19 | 16 | 18 | 20 | 12 | 6 |
| 1881-1891 | 19 | 25 | 28 | 37 | 34 | 16 | 14 | 7 | 5 | 2 | 12 | 27 |
| 1891-1901 | 7 | 8 | 3 | 10 | 7 | 18 | 11 | 1 | (+4) | (+1) | — | (+19) |
| 1901-1911 | 20 | 14 | 12 | 12 | 18 | 26 | 25 | 25 | 17 | 9 | 12 | 40 |
| 1911-1921 | 31 | 59 | 35 | 38 | 36 | 27 | 23 | 25 | 29 | 31 | 28 | (+7) |
| FEMALES. | | | | | | | | | | | | |
| *Rates per* 100,000. | | | | | | | | | | | | |
| 1871 | 366 | 1136 | 536 | 191 | 211 | 444 | 444 | 383 | 290 | 216 | 130 | 79 |
| 1881 | 311 | 871 | 415 | 181 | 209 | 393 | 411 | 322 | 205 | 151 | 103 | 60 |
| 1891 | 240 | 603 | 292 | 134 | 165 | 301 | 333 | 274 | 168 | 126 | 81 | 49 |
| 1901 | 214 | 522 | 281 | 123 | 140 | 251 | 274 | 254 | 175 | 120 | 80 | 49 |
| 1911 | 169 | 464 | 250 | 106 | 107 | 194 | 211 | 190 | 135 | 103 | 68 | 44 |
| 1921 | 115 | 200 | 150 | 61 | 75 | 151 | 152 | 129 | 97 | 75 | 55 | 30 |
| *Comparison with* 1871. | | | | | | | | | | | | |
| 1871 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1881 | 85 | 77 | 77 | 95 | 99 | 89 | 93 | 84 | 71 | 70 | 79 | 76 |
| 1891 | 66 | 53 | 54 | 70 | 78 | 68 | 75 | 72 | 58 | 58 | 62 | 62 |
| 1901 | 58 | 46 | 52 | 64 | 66 | 57 | 62 | 66 | 60 | 56 | 62 | 62 |
| 1911 | 46 | 41 | 47 | 55 | 51 | 44 | 48 | 50 | 47 | 48 | 52 | 56 |
| 1921 | 31 | 18 | 28 | 32 | 36 | 34 | 34 | 34 | 33 | 35 | 42 | 38 |
| *Percentage Decrease of Rate — Decennial.* | | | | | | | | | | | | |
| 1871-1881 | 15 | 23 | 23 | 5 | 1 | 11 | 7 | 16 | 29 | 30 | 21 | 24 |
| 1881-1891 | 23 | 31 | 30 | 26 | 21 | 23 | 19 | 15 | 18 | 17 | 21 | 18 |
| 1891-1901 | 11 | 13 | 4 | 8 | 15 | 17 | 18 | 7 | (+4) | 5 | 2 | — |
| 1901-1911 | 21 | 11 | 11 | 14 | 24 | 23 | 23 | 25 | 23 | 14 | 15 | 10 |
| 1911-1921 | 32 | 57 | 40 | 42 | 30 | 22 | 28 | 32 | 28 | 27 | 19 | 32 |

## PULMONARY TUBERCULOSIS.

The proportion of tuberculosis of the lungs in the total tuberculosis death rate shows practically no change in either sex in the years 1871 and 1921, the figures being respectively 66 and 68 per cent for males, 73 and 70 per cent for females.

In pulmonary tuberculosis, as in all the forms, the greatest decline has been experienced among the males in the earlier age groups, *i.e.* 0 to 24 years. Among the females, on the other hand, the greatest decline has been experienced only up to 14 years. In both males and females, at nearly all ages the largest decennial decline has taken place during the last ten years.

**Table III.**

DEATH RATES FROM PULMONARY TUBERCULOSIS IN AGE GROUPS.

(Numbers are five-yearly means centring on the year named.)

| Year | All Ages | –1 | 1– | 5– | 10– | 15– | 25– | 35– | 45– | 55– | 65– | 75– |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MALES. | | | | | | | | | | | | |
| | | | | | *Rates per* 100,000. | | | | | | | |
| 1871 | 252 | 174 | 121 | 77 | 98 | 373 | 432 | 343 | 309 | 262 | 175 | 73 |
| 1881 | 206 | 126 | 81 | 64 | 87 | 302 | 348 | 293 | 255 | 208 | 161 | 65 |
| 1891 | 176 | 79 | 55 | 37 | 54 | 253 | 298 | 273 | 242 | 204 | 142 | 53 |
| 1901 | 158 | 59 | 45 | 26 | 39 | 196 | 255 | 260 | 245 | 199 | 134 | 56 |
| 1911 | 120 | 37 | 31 | 17 | 29 | 136 | 185 | 190 | 198 | 177 | 111 | 33 |
| 1921 | 88 | 19 | 22 | 11 | 15 | 97 | 142 | 140 | 136 | 119 | 77 | 32 |
| | | | | | *Comparison with* 1871. | | | | | | | |
| 1871 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1881 | 82 | 72 | 67 | 83 | 89 | 81 | 81 | 85 | 83 | 79 | 92 | 89 |
| 1891 | 70 | 45 | 45 | 48 | 55 | 68 | 69 | 80 | 78 | 79 | 81 | 73 |
| 1901 | 63 | 34 | 37 | 34 | 40 | 53 | 59 | 76 | 79 | 76 | 77 | 77 |
| 1911 | 48 | 21 | 26 | 22 | 30 | 36 | 43 | 55 | 64 | 68 | 63 | 45 |
| 1921 | 35 | 11 | 18 | 14 | 15 | 26 | 33 | 41 | 44 | 45 | 44 | 44 |
| | | | | | *Percentage Decrease of Rate — Decennial.* | | | | | | | |
| 1871-1881 | 18 | 28 | 33 | 17 | 11 | 19 | 19 | 15 | 17 | 21 | 8 | 11 |
| 1881-1891 | 15 | 38 | 32 | 42 | 38 | 16 | 14 | 7 | 5 | 2 | 12 | 18 |
| 1891-1901 | 10 | 25 | 18 | 30 | 28 | 23 | 14 | 5 | (+1) | 2 | 6 | (+6) |
| 1901-1911 | 24 | 37 | 31 | 35 | 26 | 31 | 27 | 27 | 19 | 11 | 17 | 41 |
| 1911-1921 | 27 | 49 | 29 | 35 | 41 | 29 | 23 | 26 | 31 | 32 | 31 | 3 |
| | | | | | *Rates per* 100,000. | | | | | | | |
| FEMALES. | | | | | | | | | | | | |
| 1871 | 269 | 154 | 129 | 86 | 165 | 417 | 429 | 369 | 277 | 201 | 116 | 64 |
| 1881 | 227 | 116 | 83 | 76 | 149 | 365 | 396 | 312 | 196 | 142 | 89 | 52 |
| 1891 | 179 | 77 | 54 | 53 | 114 | 273 | 318 | 263 | 160 | 118 | 76 | 41 |
| 1901 | 151 | 51 | 45 | 41 | 85 | 213 | 249 | 235 | 160 | 109 | 65 | 39 |
| 1911 | 110 | 35 | 27 | 27 | 56 | 158 | 184 | 166 | 115 | 87 | 52 | 31 |
| 1921 | 80 | 14 | 19 | 16 | 39 | 122 | 133 | 114 | 81 | 58 | 39 | 19 |
| | | | | | *Comparison with* 1871. | | | | | | | |
| 1871 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1881 | 84 | 75 | 64 | 88 | 90 | 88 | 92 | 85 | 71 | 71 | 78 | 81 |
| 1891 | 67 | 50 | 42 | 62 | 69 | 65 | 74 | 71 | 58 | 59 | 66 | 64 |
| 1901 | 56 | 33 | 35 | 48 | 52 | 51 | 58 | 64 | 58 | 54 | 56 | 61 |
| 1911 | 41 | 23 | 21 | 31 | 34 | 38 | 43 | 45 | 42 | 43 | 45 | 48 |
| 1921 | 30 | 9 | 15 | 19 | 24 | 29 | 31 | 31 | 29 | 29 | 34 | 30 |
| | | | | | *Percentage Decrease of Rate — Decennial.* | | | | | | | |
| 1871-1881 | 16 | 25 | 36 | 12 | 10 | 12 | 8 | 15 | 29 | 29 | 23 | 19 |
| 1881-1891 | 21 | 33 | 34 | 30 | 23 | 26 | 20 | 16 | 18 | 17 | 15 | 21 |
| 1891-1901 | 16 | 34 | 17 | 23 | 25 | 22 | 22 | 10 | — | 8 | 15 | 5 |
| 1901-1911 | 27 | 30 | 40 | 33 | 34 | 25 | 26 | 30 | 28 | 20 | 20 | 21 |
| 1911-1921 | 27 | 61 | 29 | 39 | 29 | 24 | 28 | 31 | 31 | 33 | 24 | 38 |

**Table IV.**

DEATH RATES FROM TUBERCULOSIS, 1870-1923.

Rates per 100,000 of Population.

| Year | All Tuberculosis | | | Pulmonary Tuberculosis | | | Tuberculosis Meningitis | | | Abdominal Tuberculosis | | | Other Tuberculosis | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Both Sexes | Male | Female | Both Sexes | Male | Female | Both Sexes | Male | Female | Both Sexes | Male | Female | Both Sexes | Male | Female |
| 1870 | 390 | 398 | 384 | 274 | 262 | 286 | 61 | 72 | 52 | 31 | 36 | 26 | 24 | 28 | 20 |
| 1875 | 354 | 361 | 348 | 248 | 239 | 255 | 55 | 62 | 48 | 32 | 38 | 27 | 20 | 23 | 18 |
| 1880 | 323 | 325 | 322 | 218 | 206 | 229 | 51 | 58 | 45 | 33 | 37 | 29 | 21 | 24 | 19 |
| 1885 | 278 | 275 | 281 | 205 | 196 | 214 | 32 | 34 | 30 | 25 | 28 | 22 | 16 | 17 | 15 |
| 1890 | 257 | 265 | 250 | 191 | 189 | 194 | 28 | 33 | 24 | 21 | 24 | 19 | 16 | 19 | 14 |
| 1895 | 254 | 265 | 243 | 183 | 188 | 177 | 30 | 33 | 27 | 23 | 25 | 21 | 18 | 19 | 18 |
| 1900 | 233 | 246 | 221 | 165 | 172 | 157 | 27 | 28 | 26 | 21 | 23 | 19 | 20 | 23 | 18 |
| 1905 | 209 | 217 | 202 | 139 | 143 | 135 | 25 | 27 | 24 | 22 | 22 | 22 | 24 | 25 | 22 |
| 1910 | 180 | 190 | 170 | 114 | 121 | 108 | 26 | 29 | 24 | 20 | 20 | 19 | 20 | 21 | 18 |
| 1911 | 177 | 185 | 168 | 115 | 116 | 113 | 22 | 25 | 19 | 18 | 18 | 17 | 22 | 25 | 19 |
| 1912 | 172 | 179 | 166 | 112 | 116 | 108 | 21 | 23 | 20 | 18 | 18 | 19 | 20 | 22 | 19 |
| 1913 | 169 | 180 | 160 | 108 | 113 | 103 | 23 | 26 | 21 | 19 | 20 | 17 | 20 | 21 | 19 |
| 1914 | 162 | 175 | 150 | 104 | 110 | 97 | 21 | 23 | 19 | 18 | 19 | 17 | 19 | 22 | 16 |
| 1915 | 164 | 174 | 154 | 111 | 117 | 105 | 21 | 23 | 19 | 15 | 15 | 15 | 17 | 19 | 16 |
| 1916 | 160 | 169 | 152 | 107 | 114 | 101 | 19 | 20 | 18 | 16 | 16 | 17 | 18 | 19 | 16 |
| 1917 | 159 | 168 | 150 | 105 | 111 | 100 | 18 | 19 | 17 | 16 | 17 | 16 | 19 | 21 | 17 |
| 1918 | 160 | 164 | 157 | 108 | 111 | 106 | 17 | 17 | 17 | 15 | 15 | 15 | 19 | 20 | 18 |
| 1919 | 131 | 136 | 127 | 89 | 91 | 87 | 14 | 14 | 13 | 12 | 11 | 12 | 17 | 19 | 15 |
| 1920 | 124 | 133 | 116 | 86 | 92 | 81 | 12 | 13 | 11 | 11 | 10 | 11 | 15 | 18 | 13 |
| 1921 | 117 | 123 | 112 | 81 | 84 | 78 | 12 | 14 | 12 | 10 | 11 | 9 | 14 | 15 | 13 |
| 1922 | 119 | 127 | 111 | 82 | 87 | 78 | 12 | 13 | 11 | 11 | 12 | 10 | 13 | 14 | 12 |
| 1923 | 118 | 128 | 109 | 81 | 88 | 75 | 14 | 15 | 12 | 11 | 10 | 11 | 13 | 14 | 11 |

### 3. Mortality Statistics of the Kingdom of the Netherlands.

*Sources.* — The death-rates contained in this report have been computed from the number of deaths published in the "Bijdraden tot de Statistiek van Nederland" (1875-1900); "Statistiek van de Sterfte naar der Leeftijd en de Oorzaken van den Dood" (1901-1922); the populations, by sex and age groups, interpolated between the census data (in the "Uitkomsten der Negende tienjaarlijksche Volkstelling" and "Jaarcijfers voor het Koninkrijk der Nederlanden"). A table of the decline published by Dr. J. SANDERS ("Enkele opmerkingen betreffende de tuberculose en hare bestrijding" in *Ned. Tijdschrift voor Geneeskunde* 1923, I, No. 11), kindly supplied by the Director of the Central Bureau of Statistics of the Kingdom, The Hague, has been included herewith as Table III.

Yearly rates for the various forms of tuberculosis by age groups and sexes from 1901 to 1923 have been worked out and, though not published here, are available for further study.

#### DECLINE OF VARIOUS FORMS OF TUBERCULOSIS.

The mortality from tuberculosis (all forms) diminished by nearly half from 1901 to 1923. This decline was continual until interrupted by the war, the effect of which lasted until 1920. The decline of the mortality from pulmonary tuberculosis has followed in a general way that of total tuberculosis. It has been, however, greater and more rapid, so that the percentage of pulmonary tuberculosis in the total tuberculosis rates has fallen from 76 in 1901 to 65 in 1923. There has been practically no change since 1901 in the rates of cerebro-meningeal tuberculosis except for a very slight increase during the war, which lasted until 1920. Tuberculosis of other organs, on the other hand, declined continuously until 1915. It was then replaced by an increase, with a maximum in 1918. It was not until 1921 that the rates fell below the pre-war rates. From 1901 to 1923 this total decline was about 65 per cent.

*Decline according to Sex.*

If one considers the tuberculosis death-rates for each sex, one sees that, from 1901 to 1906, the male rate is slightly higher than the female, but that ever since it has been lower. The difference between these reached 13 per cent in recent years. This difference is due to the pulmonary element.

It is interesting to note that this sexual difference for pulmonary tuberculosis has been accentuated during the war years, so that in 1918, for instance, the rate of pulmonary tuberculosis was 147 per 100,000 for the males and 170 for the females.

Mortality from tuberculosis of the meninges and other organs is the same for both sexes.

*Decline by Ages.*

The decline has affected all ages, adults especially. In early adult life it is greater than in later years. This is also true for females. In 1923, the death-rate curve from all forms of tuberculosis by ages shows, in females as in males, a drop from the comparatively high infant rate to a low childhood rate, the peak of mortality being in the age-group 20-30 in both sexes. This peak is followed by a continual decline in rate as the age increases in females. In males the peak is followed by a somewhat greater drop, and then the rate is practically constant until the age of 70.

**Tableau I. — Table I.**

MORTALITÉ TUBERCULEUSE DANS LE ROYAUME DES PAYS-BAS.

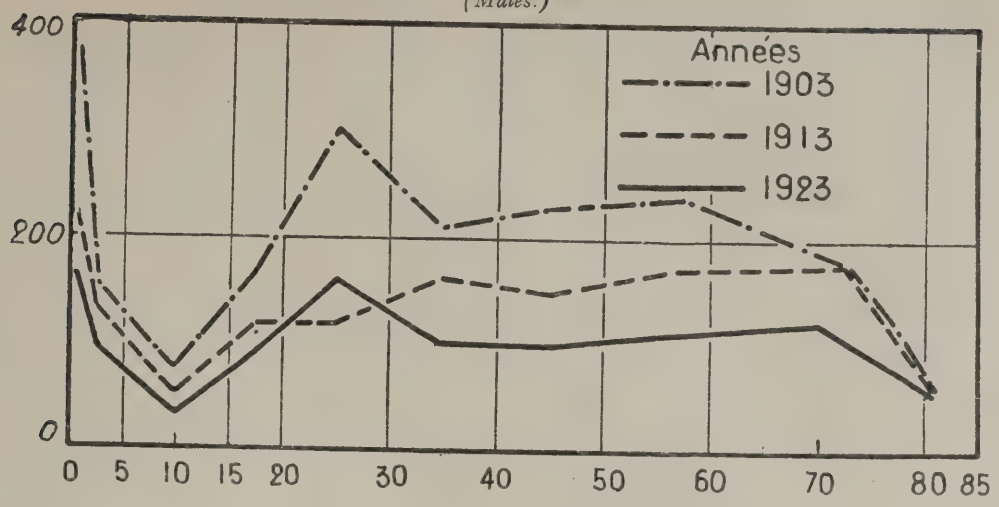
*Taux pour* 100.000 *habitants, d'après le sexe et les formes de tuberculose.*

TUBERCULOSIS MORTALITY IN THE KINGDOM OF THE NETHERLANDS.

*Rates per* 100,000, *according to sex and form of tuberculosis.*

| Période / Period | Tuberculose pulmonaire / Pulmonary Tuberculosis | | | Tuberculose meningo-cérébrale / Cerebro-meningeal Tuberculosis | | | Autres formes / Other forms of Tuberculosis | | | Tuberculose toutes formes / All forms of Tuberculosis | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M. | F. | 2 sexes | M. | F. | 2 sexes | M. | F. | 2 sexes | M. | F. | 2 sexes |
| 1875-1879 | 219 | 228 | 224 | | | | | | | | | |
| 1880-1884 | 198 | 204 | 201 | | | | | | | | | |
| 1885-1889 | 196 | 191 | 193 | | | | | | | | | |
| 1890-1894 | 191 | 190 | 190 | | | | | | | | | |
| 1895-1899 | 178 | 170 | 174 | | | | | | | | | |
| 1900 | 175 | 166 | 169 | | | | | | | | | |
| 1901 | 140 | 135 | 137 | 23 | 20 | 21 | 36 | 34 | 35 | 199 | 189 | 194 |
| 1902 | 137 | 128 | 133 | 20 | 19 | 20 | 36 | 34 | 35 | 193 | 182 | 187 |
| 1903 | 136 | 131 | 132 | 21 | 18 | 20 | 39 | 34 | 38 | 194 | 183 | 190 |
| 1904 | 131 | 128 | 129 | 21 | 18 | 20 | 37 | 34 | 35 | 189 | 180 | 184 |
| 1905 | 135 | 136 | 136 | 21 | 18 | 19 | 25 | 23 | 24 | 182 | 177 | 179 |
| 1906 | 132 | 136 | 134 | 22 | 21 | 21 | 23 | 23 | 23 | 176 | 180 | 178 |
| 1907 | 126 | 133 | 130 | 21 | 19 | 20 | 24 | 23 | 23 | 171 | 174 | 173 |
| 1908 | 118 | 121 | 120 | 21 | 19 | 20 | 23 | 22 | 22 | 162 | 161 | 162 |
| 1909 | 119 | 126 | 123 | 23 | 17 | 20 | 19 | 19 | 19 | 161 | 162 | 161 |
| 1910 | 114 | 121 | 118 | 19 | 17 | 18 | 21 | 19 | 20 | 154 | 157 | 155 |
| 1911 | 116 | 121 | 119 | 20 | 16 | 18 | 20 | 21 | 20 | 155 | 158 | 157 |
| 1912 | 107 | 114 | 110 | 17 | 16 | 17 | 16 | 18 | 17 | 140 | 148 | 144 |
| 1913 | 103 | 110 | 106 | 18 | 17 | 17 | 19 | 18 | 18 | 139 | 145 | 142 |
| 1914 | 104 | 111 | 107 | 16 | 16 | 16 | 17 | 17 | 17 | 136 | 143 | 140 |
| 1915 | 104 | 116 | 110 | 18 | 17 | 18 | 17 | 16 | 16 | 139 | 149 | 144 |
| 1916 | 119 | 134 | 127 | 23 | 19 | 21 | 19 | 21 | 20 | 161 | 174 | 167 |
| 1917 | 130 | 146 | 138 | 22 | 21 | 21 | 22 | 22 | 22 | 175 | 189 | 182 |
| 1918 | 147 | 170 | 159 | 21 | 20 | 20 | 23 | 24 | 24 | 191 | 214 | 203 |
| 1919 | 122 | 140 | 131 | 21 | 21 | 21 | 21 | 21 | 21 | 164 | 183 | 174 |
| 1920 | 101 | 120 | 110 | 18 | 17 | 18 | 19 | 19 | 19 | 139 | 156 | 147 |
| 1921 | 87 | 103 | 95 | 16 | 16 | 16 | 16 | 17 | 16 | 119 | 135 | 127 |
| 1922 | 78 | 93 | 86 | 15 | 14 | 15 | 13 | 15 | 14 | 106 | 121 | 114 |
| 1923 | 73 | 85 | 79 | 14 | 14 | 14 | 11 | 12 | 12 | 99 | 114 | 106 |

DEATH-RATES FROM TUBERCULOSIS FOR THE NETHERLANDS.
*(Males.)*




DEATH-RATES FROM TUBERCULOSIS FOR THE NETHERLANDS.
*(Females.)*

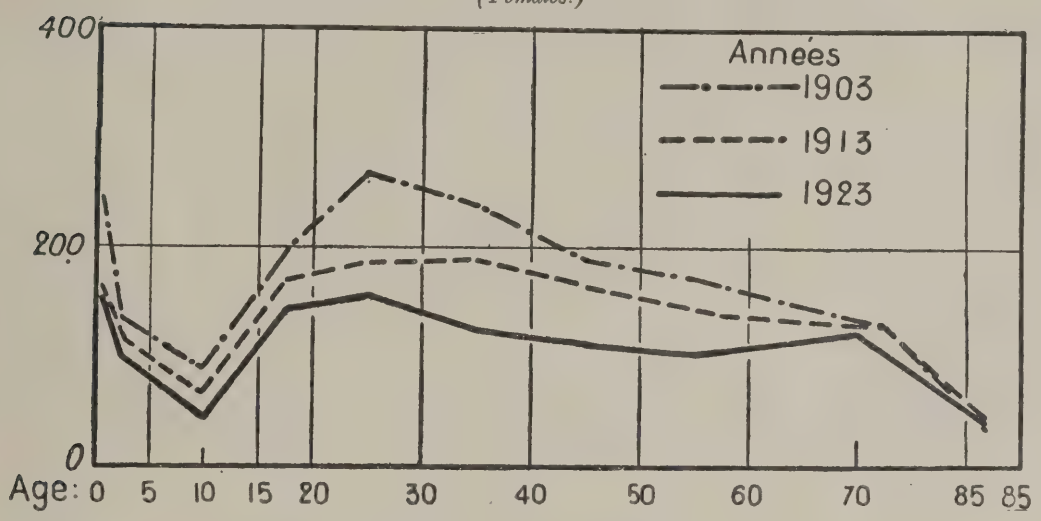



**Tableau II. — Table II.**

MORTALITÉ PAR TUBERCULOSE PULMONAIRE DANS LE ROYAUME DES PAYS-BAS.
PULMONARY TUBERCULOSIS MORTALITY IN THE KINGDOM OF THE NETHERLANDS.

| Ages | 0-1 | | 1-4 | | 5-13 | | 14-19 | | 20-29 | | 30-39 | | 40-49 | | 50-64 | | 65-79 | | 80+ | | Tous âges All ages 2 sexes | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Années Years | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | |
| 1875-1879 | 45 | 29 | 38 | 41 | 50 | 74 | 177 | 233 | | | 346 | 366 | | | 337 | 264 | 241 | 178 | 76 | 56 | 219 | 228 | 224 |
| 1880-1884 | 69 | 48 | 36 | 37 | 43 | 68 | 166 | 222 | | | 317 | 327 | | | 294 | 232 | 192 | 145 | 73 | 38 | 198 | 204 | 201 |
| 1885-1889 | 51 | 43 | 32 | 32 | 42 | 67 | 171 | 206 | | | 319 | 310 | | | 284 | 213 | 175 | 134 | 74 | 52 | 196 | 191 | 193 |
| 1890-1894 | 69 | 48 | 45 | 44 | 46 | 73 | 166 | 221 | | | 301 | 293 | | | 280 | 214 | 178 | 133 | 58 | 46 | 191 | 190 | 190 |
| 1895-1899 | 88 | 68 | 45 | 42 | 39 | 62 | 161 | 196 | | | 270 | 251 | | | 269 | 198 | 203 | 162 | 84 | 56 | 178 | 170 | 174 |
| 1900 | 78 | 77 | 54 | 41 | 32 | 57 | 153 | 185 | | | 270 | 240 | | | 252 | 209 | 213 | 160 | 90 | 97 | 175 | 166 | 169 |
| 1901 | 65 | 50 | 39 | 40 | 27 | 41 | 138 | 158 | | | 212 | 198 | | | 211 | 170 | 138 | 113 | 45 | 29 | 140 | 135 | 137 |
| 1902 | 53 | 54 | 38 | 37 | 26 | 41 | 77 | 149 | | | 214 | 190 | | | 208 | 147 | 162 | 117 | 50 | 37 | 137 | 128 | 133 |
| 1903 | 62 | 53 | 36 | 39 | 27 | 43 | 122 | 144 | 237 | 218 | 173 | 202 | 189 | 157 | 204 | 150 | 146 | 110 | 55 | 32 | 134 | 131 | 132 |
| 1904 | 63 | 50 | 42 | 39 | 26 | 45 | 115 | 159 | 226 | 205 | 180 | 187 | 171 | 166 | 206 | 140 | 157 | 111 | 65 | 84 | 131 | 131 | 129 |
| 1905 | 93 | 66 | 53 | 40 | 27 | 46 | 111 | 158 | 239 | 207 | 177 | 206 | 181 | 167 | 210 | 160 | 155 | 143 | 47 | 18 | 135 | 136 | 136 |
| 1906 | 98 | 72 | 46 | 35 | 29 | 53 | 125 | 156 | 221 | 218 | 168 | 209 | 183 | 175 | 200 | 147 | 150 | 116 | 63 | 34 | 132 | 136 | 134 |
| 1907 | 99 | 81 | 45 | 39 | 24 | 41 | 102 | 162 | 212 | 210 | 165 | 190 | 168 | 173 | 217 | 148 | 154 | 135 | 34 | 67 | 126 | 133 | 129 |
| 1908 | 91 | 70 | 36 | 35 | 22 | 36 | 95 | 139 | 198 | 185 | 145 | 182 | 153 | 152 | 201 | 150 | 165 | 192 | 38 | 29 | 118 | 121 | 120 |
| 1909 | 69 | 64 | 36 | 35 | 25 | 39 | 96 | 135 | 202 | 200 | 151 | 195 | 167 | 163 | 195 | 145 | 155 | 129 | 75 | 35 | 119 | 126 | 123 |
| 1910 | 79 | 57 | 45 | 37 | 22 | 42 | 91 | 141 | 185 | 193 | 142 | 178 | 160 | 148 | 180 | 119 | 158 | 134 | 47 | 56 | 114 | 121 | 118 |
| 1911 | 90 | 74 | 41 | 37 | 24 | 35 | 91 | 139 | 179 | 181 | 143 | 185 | 148 | 152 | 207 | 128 | 165 | 140 | 56 | 55 | 116 | 121 | 119 |
| 1912 | 58 | 47 | 38 | 37 | 22 | 32 | 94 | 133 | 165 | 177 | 135 | 166 | 136 | 137 | 178 | 128 | 158 | 124 | 65 | 31 | 107 | 114 | 110 |
| 1913 | 70 | 55 | 39 | 34 | 17 | 29 | 86 | 135 | 161 | 166 | 139 | 167 | 130 | 138 | 154 | 124 | 161 | 108 | 49 | 34 | 103 | 110 | 106 |
| 1914 | 71 | 65 | 34 | 36 | 20 | 28 | 88 | 127 | 168 | 168 | 138 | 159 | 121 | 143 | 174 | 130 | 144 | 120 | 34 | 44 | 104 | 111 | 107 |
| 1915 | 61 | 72 | 41 | 39 | 19 | 30 | 94 | 137 | 161 | 179 | 130 | 173 | 131 | 139 | 174 | 132 | 151 | 117 | 62 | 72 | 104 | 116 | 110 |
| 1916 | 62 | 53 | 46 | 58 | 25 | 43 | 120 | 177 | 186 | 204 | 139 | 199 | 147 | 152 | 208 | 136 | 159 | 127 | 32 | 50 | 119 | 134 | 127 |
| 1917 | 106 | 57 | 54 | 58 | 30 | 58 | 135 | 202 | 209 | 229 | 163 | 204 | 156 | 95 | 195 | 142 | 173 | 153 | 81 | 60 | 130 | 146 | 138 |
| 1918 | 81 | 75 | 76 | 65 | 34 | 66 | 142 | 220 | 247 | 270 | 182 | 245 | 184 | 200 | 207 | 165 | 185 | 147 | 89 | 45 | 147 | 170 | 159 |
| 1919 | 81 | 75 | 71 | 74 | 30 | 47 | 115 | 178 | 198 | 213 | 143 | 190 | 150 | 155 | 172 | 150 | 159 | 153 | 44 | 91 | 122 | 140 | 131 |
| 1920 | 96 | 59 | 46 | 39 | 21 | 39 | 103 | 160 | 169 | 183 | 116 | 158 | 107 | 146 | 145 | 131 | 159 | 134 | 43 | 60 | 101 | 120 | 110 |
| 1921 | 70 | 82 | 41 | 34 | 16 | 30 | 89 | 131 | 143 | 164 | 100 | 142 | 99 | 113 | 130 | 109 | 138 | 116 | 38 | 56 | 87 | 103 | 95 |
| 1922 | 49 | 46 | 29 | 27 | 11 | 26 | 72 | 126 | 133 | 151 | 92 | 129 | 92 | 103 | 111 | 99 | 141 | 110 | 74 | 77 | 78 | 93 | 86 |
| 1923 | 61 | 66 | 26 | 32 | 12 | 24 | 68 | 117 | 134 | 136 | 87 | 109 | 85 | 97 | 95 | 88 | 109 | 103 | 45 | 35 | 73 | 85 | 80 |

*Note.* — En 1920, un nouveau groupement d'âges a été adopté = le groupe 14–19 fut changé en 15–19
» 50–64 » » 50–59
» 64–79 » » 60–79

In 1920 a new age grouping was adopted = group 5–13 changed into 5–14

**Tableau III. — Table III.**

DÉCLIN DE LA MORTALITÉ TUBERCULEUSE DANS LE ROYAUME DES PAYS-BAS.
DECLINE OF THE TUBERCULOSIS MORTALITY IN THE KINGDOM OF THE NETHERLANDS.

| Années[1] Years | Tuberculose pulmonaire du larynx et tuberculose miliaire [1] Pulmonary, Laryngeal and Miliary Tuberculosis | | | | Autres formes de tuberculose [1] Other forms of Tuberculosis | | | |
|---|---|---|---|---|---|---|---|---|
| | 0-4 ans years | 5-19 ans years | 20-49 ans years | 50 ans et au-dessus 50 years and over | 0-4 ans years | 5-19 ans years | 20-49 ans years | 50 ans et au-dessus 50 years and over |
| 1901 . . . . | 100,— | 100,— | 100,— | 100,— | 100,— | 100,— | 100,— | 100,— |
| 1902 . . . . | 94,55 | 89,90 | 98,17 | 97,42 | 92,03 | 100,08 | 99,79 | 98,63 |
| 1903 . . . . | 96,51 | 94,13 | 99,44 | 96,58 | 109,33 | 100,05 | 106,23 | 88,84 |
| 1904 . . . . | 100,73 | 96,17 | 94,83 | 95,98 | 110,15 | 106,84 | 98,82 | 94,15 |
| 1905 . . . . | 124,01 | 95,83 | 98,61 | 104,30 | 93,79 | 79,52 | 66,57 | 76,28 |
| 1906 . . . . | 115,64 | 99,64 | 98,12 | 97,10 | 87,34 | 89,07 | 69,26 | 64,89 |
| 1907 . . . . | 120,48 | 91,33 | 93,84 | 102,76 | 86,25 | 80,00 | 68,42 | 75,57 |
| 1908 . . . . | 117,92 | 81,13 | 85,10 | 99,13 | 83,49 | 81,63 | 66,30 | 70,65 |
| 1909 . . . . | 97,42 | 82,84 | 89,84 | 97,31 | 82,29 | 74,05 | 59,07 | 57,52 |
| 1910 . . . . | 107,28 | 82,70 | 83,16 | 89,52 | 70,02 | 70,21 | 65,62 | 59,87 |
| 1911 . . . . | 111,34 | 80.35 | 81,60 | 98,77 | 72,69 | 73,15 | 60,61 | 59,34 |
| 1912 . . . . | 93,97 | 77,36 | 75,82 | 91,72 | 58,73 | 67,74 | 54,87 | 57,83 |
| 1913 . . . . | 96,56 | 74,01 | 74,56 | 85,18 | 64,60 | 71,14 | 58,02 | 59,34 |
| 1914 . . . . | 97,89 | 72,34 | 74,31 | 90,65 | 62,18 | 56,67 | 54,64 | 69,14 |
| 1915 . . . . | 197,69 | 76,79 | 75,64 | 93,05 | 60,92 | 66,51 | 59,23 | 55,72 |
| 1916 . . . . | 121,60 | 101,69 | 85,23 | 102,77 | 70,61 | 89,65 | 67,48 | 67,80 |
| 1917 . . . . | 135,78 | 116,73 | 92,80 | 107,36 | 77,01 | 91,25 | 76,19 | 81,68 |
| 1918 . . . . | 168,14 | 130,80 | 110,47 | 116,09 | 74,58 | 89,03 | 80,32 | 93,55 |
| 1919 . . . . | 169,40 | 103,23 | 87,29 | 105,39 | 76,79 | 86,50 | 71,69 | 88,97 |
| 1920 . . . . | 116,08 | 81,18 | 75,05 | 93,61 | 59,32 | 72,13 | 64,93 | 90,15 |
| 1921 . . . . | 106,17 | 66,64 | 62,08 | 88,03 | 58,57 | 57,62 | 56,05 | 82,21 |
| Déclin . / Decline. | + 6,17 | — 33,36 | — 37,92 | — 11,97 | — 41,43 | — 42,38 | — 43,95 | — 17,79 |

[1] Dr. J. SANDERS. — "Enkele opmerkingen betreffende de tuberculose en hare bestrijding *(Ned. Tijdschrift voor Geneeskunde* 1923 *le heft,* No. 11).

## 4. Tuberculosis Statistics of Amsterdam.

*Sources.* — "Statistiek der Bevolking van Amsterdam", "Statistiek van de Sterfte naar der Leeftijd en de Oorzaken van den Dood".

### PULMONARY TUBERCULOSIS.

Statistics for pulmonary tuberculosis are available since 1875. Yearly rates show irregular variations from 1875 (243 per 100,000) to 1886, reaching then the peak of 255 per 100,000. From 1886 onwards, the decline has been practically constant until 1913 (116). It then showed a rise, reaching its maximum of 185 in 1918. From 1919 to 1920 there was a sudden drop to 125, and the decline was accentuated thereafter, reaching 81 in 1923. The total decline from 1886-1923 was nearly 70 per cent.

The death-rate from meningeal tuberculosis from 1901 until 1918 shows no definite trend. From 1919, however, it declined more than 50 per cent. Other forms of tuberculosis taken together show a definite downward trend, their minimum rate being 7 per 100,000 in 1923, as compared with 27 in 1901 and 42 in 1904. The rate from tuberculosis, all forms, available since 1901 shows a regular yearly decline amounting to more than 50 per cent of the whole period.

### TUBERCULOSIS MORTALITY BY SEX.

The death-rates for tuberculosis of the lungs and for all forms have been constantly higher for males than for females, though parallel in their decline. If we analyse the curves of tuberculosis death-rates by ages, we see that in Amsterdam there is a marked difference in their shape for both sexes.

It has been shown that, for the whole of Holland, the death-rate curves, by ages, of males and females were closely parallel. In Amsterdam, on the other hand, the shape of the corresponding curves shows wide differences.

Since 1875 the highest death-rate has been observed among males at the age 50-64. The rates in early adult life were comparatively low. Among females the maximum rate has been observed at the ages 30-40, and even during the quinquennium 1915-1920 this maximum changed to the ages 15-20. Thus, from 15-40 the female rate markedly exceeds the male.

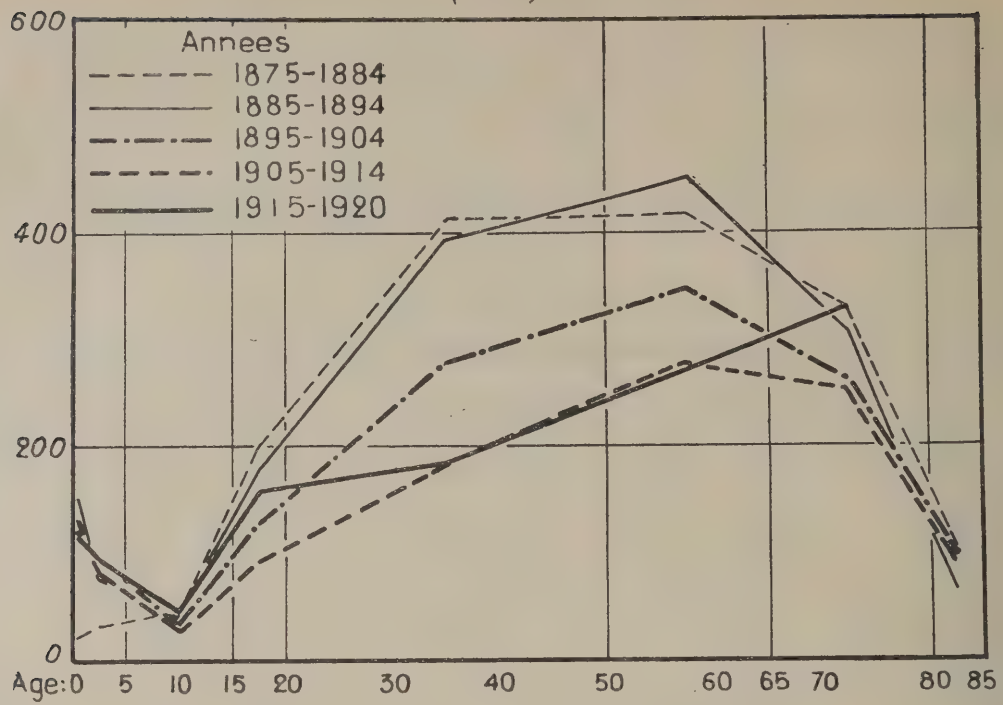
**Table I.**

TUBERCULOSIS MORTALITY IN AMSTERDAM (1875–1923).

*Rates per* 100,000.

| Years | Pulmonary Tuberculosis | Cerebro-meningeal Tuberculosis | Other forms of Tuberculosis | Tuberculosis (all forms) |
|---|---|---|---|---|
| 1875 . . | 243 | — | — | — |
| 1876 . . | 255 | — | — | — |
| 1877 . . | 237.5 | — | — | — |
| 1878 . . | 246.9 | — | — | — |
| 1879 . . | 254.1 | — | — | — |
| 1880 . . | 251.8 | — | — | — |
| 1881 . . | 238.7 | — | — | — |
| 1882 . . | 229.9 | — | — | — |
| 1883 . . | 234.2 | — | — | — |
| 1884 . . | 236.6 | — | — | — |
| 1885 . . | 251 | — | — | — |
| 1886 . . | 255 | — | — | — |
| 1887 . . | 225 | — | — | — |
| 1888 . . | 222 | — | — | — |
| 1889 . . | 231 | — | — | — |
| 1890 . . | 237.2 | — | — | — |
| 1891 . . | 208.3 | — | — | — |
| 1892 . . | 196.5 | — | — | — |
| 1893 . . | 210.9 | — | — | — |
| 1894 . . | 209.2 | — | — | — |
| 1895 . . | 205.3 | — | — | — |
| 1896 . . | 199.8 | — | — | — |
| 1897 . . | 190 | — | — | — |
| 1898 . . | 183.3 | — | — | — |
| 1899 . . | 172.1 | — | — | — |
| 1900 . . | 183.6 | — | — | — |
| 1901 . . | 151.1 | 35.2 | 26.9 | 213.2 |
| 1902 . . | 140.6 | 26.0 | 33.7 | 200.3 |
| 1903 . . | 136.9 | 28.3 | 34.6 | 199.8 |
| 1904 . . | 141.9 | 25.3 | 42.3 | 209.5 |
| 1905 . . | 146.5 | 19.9 | 18.5 | 194.9 |
| 1906 . . | 142.2 | 26.5 | 17.3 | 186.0 |
| 1907 . . | 150.5 | 24.6 | 16.8 | 191.1 |
| 1908 . . | 130.9 | 19.0 | 15.0 | 164.9 |
| 1909 . . | 140.5 | 27.4 | 14.9 | 182.8 |
| 1910 . . | 131.0 | 23.2 | 14.0 | 168.2 |
| 1911 . . | 133.5 | 25.0 | 14.7 | 173.2 |
| 1912 . . | 121.8 | 24.5 | 10.4 | 156.7 |
| 1913 . . | 116.0 | 23.3 | 15.0 | 154.3 |
| 1914 . . | 125.5 | 20.6 | 13.5 | 159.6 |
| 1915 . . | 121.9 | 19.0 | 11.5 | 152.4 |
| 1916 . . | 147.8 | 25.5 | 15.6 | 188.9 |
| 1917 . . | 159.6 | 21.8 | 21.8 | 203.2 |
| 1918 . . | 184.9 | 25.5 | 22.1 | 232.5 |
| 1919 . . | 161.6 | 19.6 | 15.3 | 196.5 |
| 1920 . . | 125.3 | 17.8 | 14.3 | 157.4 |
| 1921 . . | 98.4 | 16.9 | 9.5 | 124.8 |
| 1922 . . | 84.1 | 14.6 | 8.8 | 107.5 |
| 1923 . . | 81.4 | 11.6 | 7.0 | 100.0 |

Death-Rates from Tuberculosis for Amsterdam.
*(Males.)*




Death-Rates from Tuberculosis for Amsterdam.
*(Females.)*

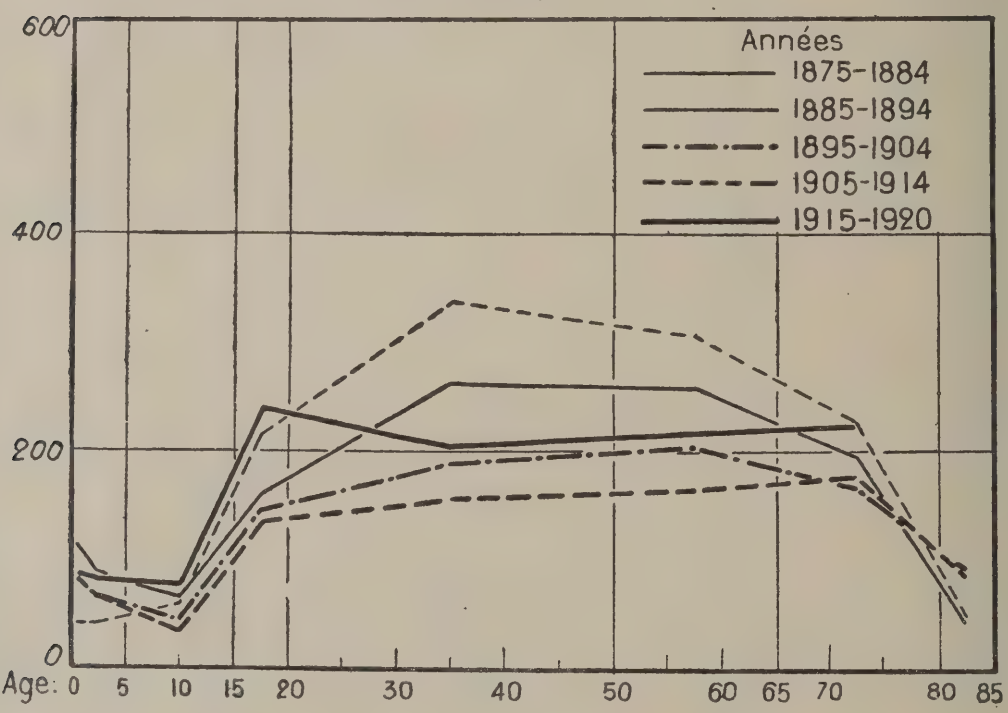



**Table II.**

Mortality from Pulmonary Tuberculosis in Amsterdam according to Age and Sex, 1875–1920.

| Ages | 1875–1884 | | 1885–1894 | | 1895–1904 | | 1905–1914 | | 1915–1920 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. |
| 0 | 23.0 | 40.2 | 151.3 | 115.6 | 118.2 | 80.6 | 130.6 | 80.7 | 115.9 | 87.1 |
| 1–4 | 36.4 | 40.3 | 77.6 | 85.9 | 99.8 | 66.9 | 83.4 | 66.9 | 98.6 | 80.1 |
| 5–13 | 45.0 | 59.4 | 41.6 | 65.4 | 33.5 | 47.5 | 25.3 | 36.1 | 44.7 | 77.0 |
| 14–19 | 200.4 | 217.0 | 176.2 | 162.7 | 129.6 | 147.0 | 92.9 | 134.8 | 175.7 | 241.3 |
| 20–49 | 411.7 | 337.0 | 394.1 | 264.4 | 279.6 | 191.6 | 184.9 | 158.2 | 185.0 | 206.1 |
| 50–64 | 418.3 | 307.0 | 452.7 | 258.6 | 348.9 | 204.4 | 273.0 | 166.4 | 329.4 | 223.5 |
| 65–79 | 328.3 | 227.1 | 306.7 | 198.6 | 263.4 | 168.9 | 252.5 | 178.3 | | |
| 80 | 100.0 | 51.5 | 64.0 | 45.1 | 95.4 | 84.7 | 89.1 | 78.3 | 181.3 | 134.5 |
| All ages | 262.0 | 230.8 | 258.9 | 191.5 | 193.2 | 145.2 | 143.9 | 126.6 | 143.2 | 140.1 |

## 5. Tuberculosis Statistics of Paris.

*Sources.* — The statistics included in this report have been prepared by M. Moine, Statistician of the "Comité National de la Tuberculose", from the mortality tables of the "Annuaires statistiques de la Ville de Paris", 1881 to 1922.

### Mortality Rate from all Forms of Tuberculosis.

The mortality rate from all forms of tuberculosis taken together from 1881 to 1885 showed an apparent increase, probably due to more accurate certification; then irregular variation without trend, ranging between 450 and 500 per 100,000. From 1895 onwards yearly rates show a definite downward trend, not interrupted by the war and the influenza epidemics. There has been a notable drop between 1918 and 1919, and then practically a stabilisation around 280 per 100,000.

Roughly, the decline from 1886 to 1922 was 49 per cent.

If we analyse the component parts of this total tuberculosis rate, we see that pulmonary and cerebro-meningeal tuberculosis have moved very much in the same way, showing first an increase, due most probably to better certification (1881-1886), then a gradual decline unaffected by the war. Tuberculosis of the other organs (peritoneum, lymph glands, bones, joints, etc.) has been more irregular in its yearly variations; from its extremes — 61 per 100,000 in 1898 to 27 in 1922 — it declined 64 per cent.

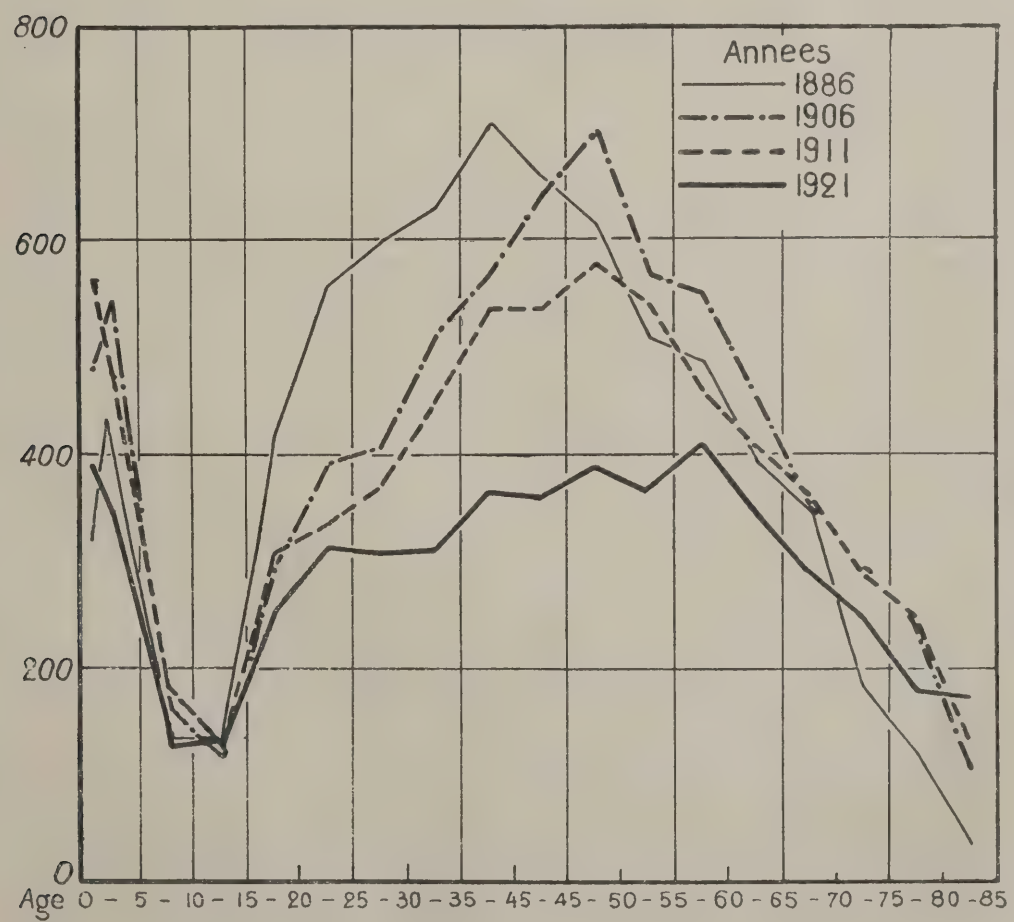
Tuberculosis of the meninges, from 1896 to 1922, declined 46 per cent. In the same period the decline for pulmonary tuberculosis was 51 per cent and for total tuberculosis 45 per cent.

Throughout the period studied, the ratio between pulmonary and total tuberculosis remained practically constant, varying from 86 to 83 per cent.

For pulmonary meningeal and total tuberculosis, the maximum decrease took place during the quinquennium 1916-1920.

Death-Rates from Tuberculosis for Paris.

*(Both Sexes.)*



## Age Distribution of the Decline.

1. *Total Tuberculosis.* — A curve of the death-rates by ages in 1921 shows the following main features:

   (*a*) High infantile rate (362 per 100,000), followed by:

   (*b*) A comparatively low childhood rate (124 per 100,000);

   (*c*) A sharp ascent from age 15 to 24;

   (*d*) Then a flattening of the curve, slowly ascending during adult age and reaching a peak at age 55-59;

   (*e*) Gradual decline from age 60 onwards.

Comparing the rate curves (specific for ages), one sees that there has been a comparatively small decline during the first year of life (29 per cent), a marked one in early childhood, 50 per cent at ages 1-4, no change at ages 5-15, but a very large decline in adult life from age 20 to 60. Between 1891 and 1922, this decline was respectively:

| | | | | | |
|---|---|---|---|---|---|
| 35 | per | cent | at | age | 20–24 |
| 45 | » | » | » | » | 25–29 |
| 59 | » | » | » | » | 30–35 |
| 57 | » | » | » | » | 35–39 |
| 50 | » | » | » | » | 40–44 |
| 41 | » | » | » | » | 45–49 |
| 40 | » | » | » | » | 50–54 |
| 36 | » | » | » | » | 55–59 |
| 25 | » | » | » | » | 60–64 |

2. *Pulmonary Tuberculosis* shows practically the same age distribution of its decline as total tuberculosis, with the exception of the first year of life, where there is no appreciable diminution.

3. The figures for *Meningeal Tuberculosis* do not show any trend during the first year of life but a constant downward one at age group 1-4. In later ages, figures indicate a rise.

4. *Tuberculosis of Other Organs* shows a very marked decrease in childhood (82 per cent at age 0-1, 76 per cent at age 1-4, 63 per cent at age 5-9), and in adult age its decline averages about 50 per cent.

[*Tables for Paris appear on following pages.*]

PARIS, 1881-1922.

MORTALITÉ TUBERCULEUSE D'APRÈS L'AGE. — TUBERCULOSIS DEATH-RATES BY AGES.
Taux par 100.000. — Rate per 100,000.

| Ages: | 0–1* an — year | | | | 1–4 ans — years | | | | 5–9 ans — years | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Année Year | Tuberculose pulmonaire Pulmonary Tuberculosis | Tuberculose méningée Meningeal Tuberculosis | Autres formes Other forms | Total | Tuberculose pulmonaire Pulmonary Tuberculosis | Tuberculose méningée Meningeal Tuberculosis | Autres formes Other forms | Total | Tuberculose pulmonaire Pulmonary Tuberculosis | Tuberculose méningée Meningeal Tuberculosis | Autres formes Other forms | Total |
| 1881 | 85,3 | | 78,5 | 164 | 140 | | 137 | 277 | 60 | | 22,6 | 82 |
| 1882 | | | | | | | | | | | | |
| 1883 | | | | | | | | | | | | |
| 1884 | | | | | | | | | | | | |
| 1885 | | | | | | | | | | | | |
| 1886 | 74,3 | 162 | 84,5 | 321 | 141 | 200 | 102 | 443 | 64,7 | 40,3 | 32,7 | 138 |
| 1887 | | | | | | | | | | | | |
| 1888 | | | | | | | | | | | | |
| 1889 | | | | | | | | | | | | |
| 1890 | | | | | | | | | | | | |
| 1891 | 134 | 248 | 85,0 | 466 | 219 | 361 | 91,7 | 673 | 72,5 | 74,5 | 31,4 | 178 |
| 1892 | | | | | | | | | | | | |
| 1893 | | | | | | | | | | | | |
| 1894 | | | | | | | | | | | | |
| 1895 | | | | | | | | | | | | |
| 1896 | 89,7 | 289 | 82,5 | 461 | 146 | 435 | 89,7 | 672 | 48,3 | 124 | 30,3 | 202 |
| 1897 | 86 | 251 | 86,0 | 423 | 157 | 395 | 87,3 | 640 | 50,1 | 104 | 26,6 | 181 |
| 1898 | 100 | 276 | 89,7 | 467 | 166 | 390 | 102 | 657 | 50,1 | 88,3 | 35,8 | 174 |
| 1899 | 107 | 293 | 76,5 | 477 | 141 | 330 | 84,5 | 555 | 47,3 | 89,3 | 20,3 | 158 |
| 1900 | 73,3 | 250 | 80,7 | 404 | 112 | 350 | 79,0 | 541 | 44,1 | 88,5 | 34,9 | 168 |
| 1901 | 148 | 275 | 70,7 | 494 | 158 | 338 | 43,4 | 539 | 46,0 | 100 | 25,1 | 171 |
| 1902 | 130 | 293 | 32,5 | 456 | 154 | 358 | 46,5 | 558 | 46,0 | 103 | 26,9 | 176 |
| 1903 | 201 | 288 | 51,7 | 541 | 150 | 341 | 43,4 | 535 | 65,3 | 105 | 22,0 | 192 |
| 1904 | 137 | 275 | 39,3 | 451 | 139 | 337 | 46,0 | 522 | 51,3 | 104 | 36,5 | 192 |
| 1905 | 111 | 323 | 31,3 | 466 | 128 | 311 | 43,8 | 482 | 51,3 | 91,5 | 32,7 | 176 |
| 1906 | 150 | 297 | 33,2 | 481 | 146 | 352 | 48,3 | 545 | 37,8 | 101 | 27,8 | 167 |
| 1907 | 155 | 303 | 29,5 | 488 | 119 | 357 | 30,4 | 507 | 37,1 | 99 | 26,8 | 163 |
| 1908 | 104 | 220 | 47,3 | 372 | 102 | 311 | 34,2 | 447 | 37,7 | 111 | 27,8 | 177 |
| 1909 | 121 | 213 | 28,7 | 363 | 121 | 322 | 41,1 | 484 | 39,9 | 105 | 22,7 | 167 |
| 1910 | 137 | 439 | 57,0 | 633 | 105 | 333 | 51,3 | 490 | 43,7 | 111 | 27,6 | 182 |
| 1911 | 116 | 296 | 34,7 | 563 | 100 | 317 | 55,8 | 473 | 45,3 | 118 | 25,8 | 189 |
| 1912 | 104 | 242 | 14,5 | 370 | 80 | 287 | 28,7 | 395 | 40,5 | 106 | 25,2 | 171 |
| 1913 | 136 | 273 | 28,7 | 437 | 102 | 300 | 31,1 | 432 | 41,7 | 112 | 27,0 | 181 |
| 1914 | 144 | 249 | 37,6 | 431 | 76,8 | 247 | 33,4 | 358 | 34,4 | 100 | 24,5 | 159 |
| 1915 | 142 | 432 | 52,7 | 627 | 80,0 | 245 | 26,4 | 350 | 46,2 | 103 | 23,9 | 173 |
| 1916 | 191 | 255 | 31,9 | 477 | 114 | 258 | 34,1 | 416 | 46,2 | 99,6 | 22,7 | 168 |
| 1917 | 131 | 174 | 33,5 | 339 | 102 | 231 | 39,6 | 373 | 55,3 | 103 | 31,9 | 190 |
| 1918 | 148 | 221 | 26,3 | 385 | 88,4 | 162 | 18,6 | 269 | 55,3 | 84,2 | 30,1 | 169 |
| 1919 | 70 | 158 | 31,1 | 259 | 121 | 245 | 35,3 | 395 | 37,6 | 105 | 26,9 | 169 |
| 1920 | 80,7 | 193 | 16,1 | 290 | 72,9 | 224 | 29,1 | 327 | 36,9 | 113 | 26,9 | 177 |
| 1921 | 146 | 181 | 34,5 | 362 | 74,0 | 229 | 20,6 | 324 | 33,4 | 79,0 | 11,3 | 124 |
| 1922 | 103 | 212 | 15,0 | 329 | 83,5 | 229 | 21,8 | 335 | 16,3 | 51,0 | 11,3 | 79 |

| | 10–14 ans — years | | | | 15–19 ans — years | | | | 20–24 ans — years | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1881 | 100 | | 6,9 | 107 | 393 | | 17,4 | 410 | 397 | | 23,3 | 421 |
| 1882 | | | | | | | | | | | | |
| 1883 | | | | | | | | | | | | |
| 1884 | | | | | | | | | | | | |
| 1885 | | | | | | | | | | | | |
| 1886 | 110 | 7,2 | 20,6 | 138 | 379 | 9,7 | 30,1 | 419 | 515 | 9,9 | 35,1 | 560 |
| 1887 | | | | | | | | | | | | |
| 1888 | | | | | | | | | | | | |
| 1889 | | | | | | | | | | | | |
| 1890 | | | | | | | | | | | | |
| 1891 | 82,0 | 16,3 | 25,3 | 123 | 317 | 17,3 | 17,9 | 353 | 457 | 14,3 | 28,2 | 499 |
| 1892 | | | | | | | | | | | | |
| 1893 | | | | | | | | | | | | |
| 1894 | | | | | | | | | | | | |
| 1895 | | | | | | | | | | | | |
| 1896 | 85,0 | 20,3 | 21,9 | 127 | 305 | 12,2 | 36,1 | 353 | 407 | 10,8 | 36,4 | 453 |
| 1897 | 80,7 | 21,6 | 20,3 | 123 | 296 | 10,2 | 30,5 | 337 | 381 | 14,5 | 42,3 | 438 |
| 1898 | 67,5 | 27,1 | 22,2 | 118 | 266 | 14,3 | 34,1 | 315 | 415 | 6,6 | 35,9 | 457 |
| 1899 | 70,7 | 22,2 | 29,4 | 122 | 265 | 13,0 | 25,9 | 305 | 380 | 10,9 | 31,2 | 422 |
| 1900 | 70,0 | 24,0 | 28,2 | 122 | 262 | 11,1 | 33,3 | 307 | 403 | 11,7 | 43,0 | 458 |

* Pour 100.000 naissances vivantes. — Per 100,000 living births.

| Année Year | Tuberculose Pulmonaire Pulmonary Tuberculosis | Tuberculose méningée Meningeal Tuberculosis | Autres formes Other forms | Total | Tuberculose Pulmonaire Pulmonary Tuberculosis | Tuberculose méningée Meningeal Tuberculosis | Autres formes Other forms | Total | Tuberculose pulmonaire Pulmonary Tuberculosis | Tuberculose méningée Meningeal Tuberculosis | Autres formes Other forms | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 10–14 ans — Years | | | | 15–19 ans — Years | | | | 20–24 ans — Years | | | |
| 1901 | 69,5 | 25,8 | 20,4 | 116 | 257 | 16,2 | 13,0 | 287 | 414 | 19,6 | 19,6 | 452 |
| 1902 | 73,7 | 18,6 | 16,2 | 108 | 259 | 13,0 | 14,8 | 287 | 380 | 11,3 | 16,9 | 410 |
| 1903 | 67,3 | 28,8 | 22,2 | 118 | 280 | 15,3 | 16,7 | 312 | 375 | 16,9 | 19,9 | 410 |
| 1904 | 91,5 | 22,3 | 19,9 | 134 | 280 | 15,5 | 22,0 | 318 | 370 | 13,3 | 23,2 | 407 |
| 1905 | 71,7 | 33,2 | 15,7 | 121 | 269 | 15,9 | 29,0 | 314 | 379 | 15,1 | 21,3 | 415 |
| 1906 | 65,0 | 28,4 | 22,3 | 116 | 253 | 20,1 | 27,1 | 300 | 354 | 10,7 | 29,4 | 394 |
| 1907 | 75,0 | 27,8 | 27,1 | 130 | 253 | 18,7 | 21,5 | 303 | 375 | 16,3 | 26,9 | 418 |
| 1908 | 75,0 | 27,8 | 21,7 | 125 | 252 | 17,8 | 20,6 | 301 | 351 | 14,4 | 26,5 | 392 |
| 1909 | 62,2 | 26,6 | 26,0 | 115 | 240 | 13,0 | 17,4 | 271 | 296 | 13,3 | 16,7 | 327 |
| 1910 | 61,7 | 29,6 | 21,9 | 113 | 237 | 21,9 | 22,4 | 282 | 298 | 11,3 | 19,5 | 328 |
| 1911 | 68,7 | 33,1 | 23,7 | 125 | 261 | 23,7 | 26,5 | 310 | 302 | 15,0 | 19,1 | 336 |
| 1912 | 59,3 | 30,8 | 20,1 | 110 | 227 | 18,8 | 22,3 | 268 | 281 | 15,0 | 18,7 | 315 |
| 1913 | 67,0 | 44,3 | 29,0 | 141 | 235 | 25,9 | 25,9 | 286 | 295 | 15,4 | 26,3 | 326 |
| 1914 | 69,2 | 36,1 | 32,0 | 137 | 252 | 25,5 | 28,1 | 306 | 293 | 14,3 | 20,8 | 328 |
| 1915 | 73,4 | 43,8 | 33,2 | 151 | 238 | 19,7 | 20,5 | 278 | 248 | 10,9 | 18,8 | 278 |
| 1916 | 79,9 | 55,7 | 29,6 | 165 | 251 | 25,5 | 31,3 | 308 | 278 | 13,0 | 16,7 | 307 |
| 1917 | 102 | 56,3 | 36,7 | 195 | 276 | 23,7 | 31,3 | 331 | 284 | 15,0 | 24,9 | 324 |
| 1918 | 102 | 40,3 | 23,1 | 166 | 257 | 27,7 | 28,2 | 313 | 292 | 12,3 | 24,3 | 329 |
| 1919 | 79,0 | 46,5 | 15,1 | 141 | 223 | 30,4 | 31,3 | 285 | 260 | 12,1 | 23,5 | 296 |
| 1920 | 56,7 | 30,7 | 18,7 | 106 | 222 | 26,8 | 24,1 | 273 | 246 | 18,3 | 19,1 | 284 |
| 1921 | 70,5 | 40,5 | 18,7 | 130 | 186 | 24,6 | 22,4 | 233 | 252 | 15,0 | 25,7 | 293 |
| 1922 | 40,5 | 33,2 | 10,3 | 84 | 201 | 21,9 | 25,1 | 248 | 271 | 20,9 | 25,7 | 317 |
| | 25–29 ans — years | | | | 30–34 ans — years | | | | 35–39 ans — years | | | |
| 1881 | 647 | | 20,6 | 667 | 637 | | 18,3 | 656 | 672 | | 27,8 | 700 |
| 1882 | | | | | | | | | | | | |
| 1883 | | | | | | | | | | | | |
| 1884 | | | | | | | | | | | | |
| 1885 | | | | | | | | | | | | |
| 1886 | 559 | 8,1 | 33,8 | 601 | 590 | 7,0 | 36,0 | 633 | 657 | 9,5 | 43,5 | 710 |
| 1887 | | | | | | | | | | | | |
| 1888 | | | | | | | | | | | | |
| 1889 | | | | | | | | | | | | |
| 1890 | | | | | | | | | | | | |
| 1891 | 489 | 10,7 | 25,4 | 526 | 627 | 7,4 | 30,9 | 667 | 657 | 8,6 | 36,2 | 703 |
| 1892 | | | | | | | | | | | | |
| 1893 | | | | | | | | | | | | |
| 1894 | | | | | | | | | | | | |
| 1895 | | | | | | | | | | | | |
| 1896 | 407 | 7,4 | 45,3 | 460 | 533 | 10,2 | 49,7 | 593 | 570 | 6,6 | 55,8 | 632 |
| 1897 | 381 | 6,6 | 36,9 | 425 | 493 | 12,5 | 53,5 | 560 | 527 | 6,6 | 69,1 | 603 |
| 1898 | 399 | 8,5 | 42,7 | 450 | 483 | 13,2 | 58,1 | 555 | 587 | 13,7 | 66,7 | 668 |
| 1899 | 387 | 10,5 | 30,5 | 427 | 498 | 5,6 | 51,7 | 554 | 578 | 10,8 | 48,7 | 638 |
| 1900 | 402 | 8,7 | 52,5 | 462 | 495 | 10,1 | 51,0 | 557 | 563 | 9,6 | 70,0 | 643 |
| 1901 | 402 | 7,7 | 20,7 | 430 | 487 | 11,6 | 24,3 | 524 | 603 | 11,2 | 27,2 | 641 |
| 1902 | 402 | 9,3 | 21,1 | 432 | 483 | 10,5 | 26,2 | 521 | 601 | 14,5 | 27,7 | 643 |
| 1903 | 415 | 20,1 | 22,1 | 457 | 462 | 9,7 | 20,6 | 492 | 570 | 15,7 | 27,3 | 612 |
| 1904 | 414 | 11,1 | 24,8 | 449 | 463 | 11,3 | 27,0 | 502 | 536 | 10,2 | 29,9 | 576 |
| 1905 | 375 | 11,7 | 16,6 | 404 | 452 | 13,5 | 17,5 | 484 | 536 | 9,8 | 33,3 | 580 |
| 1906 | 372 | 13,0 | 26,1 | 410 | 475 | 9,8 | 28,5 | 514 | 520 | 15,7 | 33,8 | 569 |
| 1907 | 391 | 15,7 | 26,7 | 433 | 540 | 15,7 | 23,0 | 575 | 518 | 13,0 | 33,0 | 564 |
| 1908 | 379 | 13,0 | 27,7 | 420 | 511 | 17,2 | 27,3 | 555 | 545 | 13,8 | 36,5 | 596 |
| 1909 | 317 | 11,7 | 16,0 | 343 | 435 | 16,0 | 15,0 | 465 | 493 | 16,6 | 15,8 | 525 |
| 1910 | 337 | 12,4 | 20,7 | 370 | 428 | 17,0 | 20,9 | 457 | 480 | 13,6 | 23,7 | 517 |
| 1911 | 337 | 14,8 | 19,8 | 373 | 418 | 14,4 | 18,0 | 451 | 506 | 16,2 | 17,3 | 540 |
| 1912 | 306 | 12,7 | 21,3 | 341 | 400 | 14,7 | 19,0 | 434 | 506 | 14,7 | 33,2 | 553 |
| 1913 | 313 | 11,8 | 24,6 | 351 | 372 | 14,4 | 29,1 | 415 | 416 | 17,7 | 35,5 | 520 |
| 1914 | 307 | 12,1 | 15,7 | 334 | 383 | 11,1 | 17,3 | 408 | 479 | 15,1 | 30,6 | 525 |
| 1915 | 271 | 11,2 | 18,1 | 300 | 343 | 10,8 | 20,3 | 375 | 416 | 11,7 | 28,3 | 457 |
| 1916 | 262 | 5,9 | 15,7 | 284 | 300 | 8,8 | 20,3 | 329 | 360 | 12,1 | 24,8 | 396 |
| 1917 | 248 | 8,6 | 17,8 | 274 | 296 | 9,8 | 22,3 | 327 | 343 | 11,3 | 30,2 | 385 |
| 1918 | 278 | 10,2 | 20,7 | 304 | 305 | 7,2 | 18,3 | 330 | 319 | 11,0 | 18,5 | 352 |
| 1919 | 226 | 4,7 | 12,9 | 253 | 249 | 9,3 | 13,3 | 263 | 276 | 9,3 | 19,7 | 306 |
| 1920 | 241 | 12,2 | 19,7 | 273 | 237 | 12,0 | 11,0 | 260 | 291 | 9,0 | 18,6 | 319 |
| 1921 | 259 | 12,2 | 17,3 | 288 | 259 | 10,6 | 21,3 | 291 | 309 | 15,5 | 20,8 | 345 |
| 1922 | 263 | 11,9 | 16,7 | 292 | 241 | 14,3 | 19,3 | 274 | 274 | 10,4 | 21,9 | 306 |

| Année Year | Tuberculose pulmonaire Pulmonary Tuberculosis | Tuberculose méningée Meningeal Tuberculosis | Autres formes Other forms | Total | Tuberculose pulmonaire Pulmonary Tuberculosis | Tuberculose méningée Meningeal Tuberculosis | Autres formes Other forms | Total | Tuberculose pulmonaire Pulmonary Tuberculosis | Tuberculose méningée Meningeal Tuberculosis | Autres formes Other forms | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 40–44 ans — years | | | | 45–49 ans — years | | | | 50–54 ans — years | | | |
| 1881 | 615 | | 23,0 | 637 | 513 | | 17,5 | 530 | 449 | | 15,3 | 464 |
| 1882 | | | | | | | | | | | | |
| 1883 | | | | | | | | | | | | |
| 1884 | | | | | | | | | | | | |
| 1885 | | | | | | | | | | | | |
| 1886 | 607 | 8,0 | 49,0 | 665 | 557 | 4,9 | 50,7 | 613 | 467 | 3,3 | 42,3 | 513 |
| 1887 | | | | | | | | | | | | |
| 1888 | | | | | | | | | | | | |
| 1889 | | | | | | | | | | | | |
| 1890 | | | | | | | | | | | | |
| 1891 | 637 | 6,4 | 32,9 | 677 | 607 | 10,5 | 26,6 | 645 | 563 | 4,6 | 34,1 | 602 |
| 1892 | | | | | | | | | | | | |
| 1893 | | | | | | | | | | | | |
| 1894 | | | | | | | | | | | | |
| 1895 | | | | | | | | | | | | |
| 1896 | 583 | 10,6 | 65,3 | 660 | 560 | 5,3 | 56,1 | 620 | 470 | 3,7 | 55,3 | 529 |
| 1897 | 563 | 6,1 | 65,3 | 633 | 537 | 6,5 | 67,7 | 611 | 503 | 5,2 | 68,0 | 575 |
| 1898 | 575 | 7,1 | 68,0 | 649 | 583 | 6,5 | 75,0 | 664 | 505 | 3,0 | 63,5 | 571 |
| 1899 | 513 | 7,4 | 55,0 | 575 | 542 | 5,8 | 66,3 | 614 | 500 | 2,2 | 53,2 | 556 |
| 1900 | 551 | 9,7 | 71,3 | 632 | 593 | 6,4 | 78,5 | 670 | 490 | 4,3 | 83,3 | 577 |
| 1901 | 457 | 8,8 | 16,7 | 482 | 575 | 9,9 | 31,4 | 617 | 560 | 2,2 | 27,3 | 590 |
| 1902 | 622 | 11,1 | 36,6 | 670 | 628 | 10,5 | 32,6 | 671 | 584 | 2,9 | 27,3 | 614 |
| 1903 | 630 | 13,9 | 42,7 | 687 | 578 | 8,7 | 41,3 | 628 | 564 | 8,6 | 35,1 | 607 |
| 1904 | 576 | 11,1 | 32,1 | 621 | 560 | 30,8 | 4,5 | 595 | 557 | 5,5 | 31,1 | 694 |
| 1905 | 572 | 14,7 | 35,7 | 621 | 608 | 9,5 | 34,2 | 653 | 555 | 4,2 | 36,6 | 596 |
| 1906 | 603 | 12,5 | 28,5 | 643 | 653 | 10,6 | 43,7 | 705 | 513 | 13,1 | 44,3 | 570 |
| 1907 | 554 | 12,5 | 37,9 | 603 | 695 | 12,3 | 44,3 | 752 | 529 | 7,6 | 37,3 | 574 |
| 1908 | 576 | 13,7 | 50,1 | 641 | 647 | 23,5 | 48,2 | 719 | 553 | 10,3 | 46,3 | 610 |
| 1909 | 540 | 12,9 | 18,7 | 573 | 570 | 10,9 | 23,3 | 604 | 537 | 9,6 | 23,5 | 569 |
| 1910 | 537 | 15,2 | 22,3 | 575 | 581 | 11,4 | 23,8 | 617 | 536 | 7,7 | 22,3 | 566 |
| 1011 | 500 | 14,7 | 21,9 | 539 | 538 | 14,0 | 28,5 | 581 | 501 | 8,3 | 33,1 | 542 |
| 1912 | 480 | 5,8 | 55,7 | 541 | 507 | 9,3 | 34,7 | 556 | 472 | 7,6 | 33,8 | 514 |
| 1913 | 476 | 13,4 | 40,7 | 530 | 476 | 8,3 | 32,7 | 517 | 458 | 7,6 | 35,1 | 501 |
| 1914 | 517 | 11,6 | 26,8 | 557 | 500 | 12,4 | 44,4 | 535 | 500 | 4,5 | 33,1 | 537 |
| 1915 | 457 | 14,3 | 32,1 | 513 | 528 | 14,5 | 29,6 | 570 | 522 | 9,6 | 42,1 | 573 |
| 1916 | 408 | 11,6 | 30,4 | 449 | 472 | 12,4 | 34,8 | 518 | 492 | 4,5 | 32,5 | 528 |
| 1917 | 365 | 6,3 | 31,3 | 402 | 406 | 11,9 | 32,2 | 450 | 512 | 7,0 | 40,8 | 560 |
| 1918 | 328 | 8,0 | 24,1 | 360 | 377 | 8,8 | 31,7 | 418 | 488 | 7,0 | 36,3 | 531 |
| 1919 | 269 | 5,7 | 14,8 | 290 | 325 | 7,0 | 24,1 | 355 | 335 | 6,4 | 17,9 | 358 |
| 1920 | 290 | 13,2 | 30,9 | 334 | 275 | 7,0 | 20,9 | 363 | 296 | 4,1 | 28,3 | 328 |
| 1921 | 307 | 9,2 | 22,8 | 340 | 333 | 11,1 | 23,7 | 368 | 309 | 10,4 | 27,8 | 347 |
| 1922 | 307 | 8,4 | 22,8 | 338 | 346 | 6,0 | 27,4 | 379 | 318 | 11,6 | 27,8 | 357 |
| | 55 - 59 ans — years | | | | 60 - 64 ans — years | | | | 65 - 69 ans — years | | | |
| 1881 | 395 | | 24,3 | 409 | 312 | | 16,6 | 329 | 235 | | 11,0 | 246 |
| 1882 | | | | | | | | | | | | |
| 1883 | | | | | | | | | | | | |
| 1884 | | | | | | | | | | | | |
| 1885 | | | | | | | | | | | | |
| 1886 | 440 | 3,9 | 46,1 | 490 | 350 | 2,5 | 42,3 | 395 | 306 | 5,5 | 40,3 | 352 |
| 1887 | | | | | | | | | | | | |
| 1888 | | | | | | | | | | | | |
| 1889 | | | | | | | | | | | | |
| 1890 | | | | | | | | | | | | |
| 1891 | 500 | 2,9 | 32,3 | 535 | 445 | 1,2 | 21,2 | 407 | 310 | 0 | 24,8 | 334 |
| 1892 | | | | | | | | | | | | |
| 1893 | | | | | | | | | | | | |
| 1894 | | | | | | | | | | | | |
| 1895 | | | | | | | | | | | | |
| 1896 | 455 | 3,8 | 82,1 | 541 | 379 | 2,5 | 56,5 | 438 | 352 | 0 | 65,7 | 417 |
| 1897 | 405 | 3,8 | 65,0 | 474 | 360 | 3,7 | 72,5 | 437 | 306 | 3,5 | 26,0 | 335 |
| 1898 | 450 | 0,9 | 64,3 | 515 | 362 | 3,7 | 61,5 | 427 | 317 | 0 | 58,7 | 386 |
| 1899 | 503 | 2,7 | 57,5 | 563 | 372 | 1,2 | 50,7 | 424 | 359 | 3,4 | 39,5 | 402 |
| 1900 | 483 | 4,6 | 62,2 | 550 | 392 | 5,9 | 49,5 | 447 | 377 | 1,7 | 55,7 | 435 |

| Année / Year | Tuberculose pulmonaire Pulmonary Tuberculosis | Tuberculose méningée Meningeal Tuberculosis | Autres formes Other forms | Total | Tuberculose pulmonaire Pulmonary Tuberculosis | Tuberculose méningée Meningeal Tuberculosis | Autres formes Other forms | Total | Tuberculose pulmonaire Pulmonary Tuberculosis | Tuberculose méningée Meningeal Tuberculosis | Autres formes Other forms | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 55–59 ans — years | | | | 60–64 ans — years | | | | 65–69 ans — years | | | |
| 1901 | 494 | 1,8 | 29,2 | 525 | 452 | 2,4 | 33,0 | 487 | 407 | 3,4 | 34,3 | 445 |
| 1902 | 470 | 2,7 | 44,7 | 517 | 433 | 2,4 | 29,5 | 463 | 349 | 1,7 | 22,3 | 373 |
| 1903 | 476 | 4 5 | 43,8 | 525 | 547 | 2,4 | 37,7 | 587 | 350 | 1,7 | 30,9 | 383 |
| 1904 | 455 | 5,3 | 27,2 | 488 | 389 | 0 | 27,9 | 417 | 359 | 4,9 | 25,9 | 390 |
| 1905 | 550 | 4,4 | 40,3 | 595 | 355 | 4,5 | 40,1 | 400 | 384 | 1,6 | 21,1 | 407 |
| 1906 | 508 | 6,1 | 40,3 | 555 | 423 | 4,5 | 30,1 | 457 | 328 | 1,6 | 27,5 | 357 |
| 1907 | 553 | 7,9 | 44,7 | 605 | 445 | 5,6 | 36,7 | 488 | 387 | 6,5 | 37,3 | 431 |
| 1908 | 515 | 5,3 | 44,7 | 565 | 455 | 3,3 | 41,3 | 500 | 378 | 4,9 | 30,8 | 413 |
| 1909 | 445 | 6,0 | 34,1 | 486 | 379 | 4,6 | 20,8 | 404 | 322 | 0 | 21,2 | 353 |
| 1910 | 491 | 7,7 | 19,7 | 519 | 406 | 4,6 | 21,9 | 433 | 366 | 1,6 | 18,0 | 385 |
| 1911 | 431 | 6,0 | 24,8 | 462 | 386 | 2,3 | 20,8 | 409 | 330 | 6,5 | 26,1 | 363 |
| 1912 | 477 | 6,0 | 51,3 | 515 | 375 | 3,5 | 31,2 | 410 | 402 | 3,3 | 31,0 | 436 |
| 1913 | 395 | 6,0 | 21,4 | 423 | 413 | 3,5 | 36,9 | 453 | 295 | 4,9 | 55,5 | 356 |
| 1914 | 450 | 9,4 | 33,4 | 494 | 393 | 2,3 | 25,4 | 411 | 300 | 6,5 | 31,0 | 338 |
| 1915 | 527 | 6,0 | 45,4 | 579 | 407 | 4,6 | 36,9 | 448 | 431 | 3,3 | 22,8 | 457 |
| 1916 | 532 | 3,4 | 40,3 | 582 | 489 | 4,6 | 47,3 | 531 | 426 | 4,9 | 37,5 | 468 |
| 1917 | 508 | 4,3 | 54,0 | 566 | 456 | 3,5 | 48,5 | 508 | 432 | 0 | 44,1 | 476 |
| 1918 | 473 | 6,0 | 46,3 | 525 | 405 | 3,5 | 50,7 | 459 | 454 | 1,6 | 32,7 | 488 |
| 1919 | 343 | 9,3 | 32,9 | 386 | 298 | 0,9 | 23,6 | 322 | 291 | 1,4 | 28,4 | 321 |
| 1920 | 296 | 2,9 | 37,9 | 337 | 252 | 2,8 | 23,6 | 279 | 222 | 1,4 | 32,7 | 256 |
| 1921 | 360 | 4,3 | 24,3 | 388 | 289 | 3,8 | 31,1 | 324 | 239 | 1,4 | 28,4 | 269 |
| 1922 | 310 | 5,7 | 25,0 | 341 | 264 | 5,7 | 37,8 | 307 | 259 | 4,3 | 24,1 | 287 |
| | 70 - 74 ans — years | | | | 75 - 79 ans — years | | | | 80 et au-dessus — up | | | |
| 1881 | 158 | 0 | 3,5 | 162 | 124 | 0 | 13,8 | 138 | 111 | 0 | 20,1 | 131 |
| 1882 | | | | | | | | | | | | |
| 1883 | | | | | | | | | | | | |
| 1884 | | | | | | | | | | | | |
| 1885 | | | | | | | | | | | | |
| 1886 | 171 | 5,9 | 8,9 | 186 | 118 | 0 | 5,6 | 124 | 28,9 | 9 | 9,6 | 38,5 |
| 1887 | | | | | | | | | | | | |
| 1888 | | | | | | | | | | | | |
| 1889 | | | | | | | | | | | | |
| 1890 | | | | | | | | | | | | |
| 1891 | 215 | 0 | 23,6 | 239 | 158 | 0 | 16,9 | 174 | 135 | 0 | 9,6 | 145 |
| 1892 | | | | | | | | | | | | |
| 1893 | | | | | | | | | | | | |
| 1894 | | | | | | | | | | | | |
| 1895 | | | | | | | | | | | | |
| 1896 | 215 | 2,8 | 41,2 | 259 | 155 | 0 | 41,3 | 196 | 26,8 | 0 | 17,9 | 44,7 |
| 1897 | 223 | 0 | 54,8 | 278 | 160 | 0 | 25,8 | 186 | 143 | 8,9 | 8,9 | 161 |
| 1898 | 217 | 2,8 | 52,1 | 272 | 186 | 0 | 15,5 | 202 | 89,3 | 8,9 | 26,8 | 125 |
| 1899 | 217 | 0 | 26,3 | 243 | 160 | 0 | 20,6 | 181 | 127 | 9,1 | 45,6 | 182 |
| 1900 | 217 | 0 | 52,7 | 269 | 181 | 0 | 36,1 | 217 | 200 | 9,1 | 54,7 | 264 |
| 1901 | 243 | 0 | 15,8 | 259 | 237 | 0 | 46,5 | 284 | 164 | 0 | 0 | 164 |
| 1902 | 296 | 0 | 18,5 | 314 | 211 | 0 | 25,8 | 237 | 54,7 | 0 | 9,1 | 63,7 |
| 1903 | 222 | 2,6 | 39,5 | 264 | 227 | 0 | 56,7 | 284 | 109 | 0 | 0 | 109 |
| 1904 | 303 | 0 | 29,9 | 333 | 180 | 0 | 9,8 | 190 | 154 | 0 | 8,6 | 163 |
| 1905 | 274 | 0 | 27,4 | 301 | 166 | 0 | 34,2 | 200 | 137 | 0 | 8,6 | 146 |
| 1906 | 249 | 5,0 | 39,8 | 294 | 225 | 0 | 24,4 | 249 | 111 | 0 | 0 | 111 |
| 1907 | 276 | 7,5 | 29,9 | 313 | 239 | 0 | 48,7 | 288 | 197 | 0 | 25,7 | 223 |
| 1908 | 266 | 0 | 27,4 | 294 | 166 | 0 | 19,5 | 186 | 103 | 0 | 8,6 | 111 |
| 1909 | 267 | 0 | 27,2 | 294 | 210 | 0 | 26,9 | 237 | 137 | 0 | 14,4 | 151 |
| 1910 | 279 | 2,5 | 22,2 | 304 | 170 | 0 | 22,4 | 193 | 108 | 0 | 7,2 | 115 |
| 1911 | 262 | 2,5 | 24,7 | 289 | 232 | 0 | 17,8 | 250 | 129 | 0 | 7,2 | 137 |
| 1912 | 279 | 2,5 | 24,7 | 306 | 224 | 0 | 26,8 | 251 | 57,7 | 0 | 28,8 | 86,5 |
| 1913 | 207 | 0 | 17,3 | 225 | 192 | 4,5 | 31,3 | 228 | 129 | 7,2 | 21,6 | 158 |
| 1914 | 213 | 2,5 | 9,9 | 225 | 205 | 31,3 | 26,8 | 263 | 144 | 7,2 | 14,4 | 166 |
| 1915 | 279 | 0 | 29,6 | 309 | 295 | 4,5 | 35,8 | 335 | 173 | 0 | 14,4 | 187 |
| 1916 | 269 | 2,5 | 42,0 | 314 | 335 | 0 | 35,8 | 371 | 158 | 7,2 | 35,0 | 202 |
| 1917 | 336 | 0 | 54,3 | 390 | 326 | 0 | 26,8 | 353 | 223 | 0 | 14,4 | 237 |
| 1918 | 289 | 2,5 | 34,5 | 326 | 213 | 4,5 | 26,8 | 344 | 209 | 0 | 43,2 | 252 |
| 1919 | 196 | 0 | 34,8 | 231 | 169 | 0 | 27,5 | 197 | 135 | 0 | 6,4 | 141 |
| 1920 | 207 | 0 | 34,8 | 242 | 134 | 3,9 | 51,1 | 189 | 122 | 0 | 19,3 | 141 |
| 1921 | 197 | 2,2 | 26,1 | 225 | 146 | 0 | 15,7 | 161 | 115 | 12,8 | 25,7 | 154 |
| 1922 | 183 | 6,5 | 28,3 | 218 | 129 | 0 | 31,4 | 161 | 77,0 | 6,4 | 25,7 | 109 |

| Tous âges réunis | | | | | Tous âges réunis | | | | | Tous âges réunis | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Années | Tuberculose pulmonaire | Tuberculose méningée | Autres formes | Total | Années | Tuberculose pulmonaire | Tuberculose méningée | Autres formes | Total | Années | Tuberculose pulmonaire | Tuberculose méningée | Autres formes | Total |
| All ages | | | | | All ages | | | | | All ages | | | | |
| Years | Pulmonary tuberculosis | Meningeal tuberculosis | Other forms | Total | Years | Pulmonary tuberculosis | Meningeal tuberculosis | Other forms | Total | Years | Pulmonary tuberculosis | Meningeal tuberculosis | Other forms | Total |
| 1881 | 428 | | 28,1 | 456 | 1896 | 409 | 45,0 | 55,3 | 509 | 1911 | 343 | 39,6 | 17,4 | 400 |
| 1882 | | | | | 1897 | 391 | 41,1 | 58,5 | 490 | 1912 | 330 | 35,0 | 27,4 | 394 |
| 1883 | | | | | 1898 | 411 | 41,1 | 60,7 | 512 | 1913 | 322 | 37,9 | 30,7 | 385 |
| 1884 | | | | | 1899 | 395 | 37,3 | 49,7 | 483 | 1914 | 328 | 33,5 | 25,2 | 396 |
| 1885 | | | | | 1900 | 379 | 37,0 | 56,0 | 473 | 1915 | 315 | 33,5 | 27,3 | 376 |
| 1886 | 470 | 27,1 | 46,3 | 543 | 1901 | 403 | 39,1 | 26,1 | 468 | 1916 | 303 | 31,7 | 27,1 | 361 |
| 1887 | | | | | 1902 | 395 | 39,5 | 26,6 | 462 | 1917 | 296 | 30,2 | 31,4 | 358 |
| 1888 | | | | | 1903 | 391 | 41,7 | 28,9 | 462 | 1918 | 287 | 25,4 | 26,5 | 339 |
| 1889 | | | | | 1904 | 382 | 37,3 | 27,9 | 448 | 1919 | 236 | 24,8 | 20,8 | 279 |
| 1890 | | | | | 1905 | 379 | 37,5 | 28,3 | 445 | 1920 | 222 | 26,5 | 23,0 | 272 |
| 1891 | 443 | 35,8 | 33,1 | 513 | 1906 | 378 | 40,0 | 30,2 | 448 | 1921 | 238 | 25,7 | 22,0 | 280 |
| 1892 | | | | | 1907 | 397 | 41,5 | 29,6 | 467 | 1922 | 232 | 24,3 | 21,7 | 278 |
| 1893 | | | | | 1908 | 386 | 38,9 | 33,6 | 459 | | | | | |
| 1894 | | | | | 1909 | 364 | 37,1 | 23,3 | 423 | | | | | |
| 1895 | | | | | 1910 | 350 | 39,0 | 22,6 | 411 | | | | | |

## 6. **Tuberculosis Statistics in Switzerland.**

*Sources.* — The information regarding tuberculosis statistics was obtained from the Federal Bureau of Statistics, Department of the Interior, Berne, from "Les causes de décès, 1871-1890, 1891-1900"; "Mouvement de la population de la Suisse pendant 1901-1922"; "Les causes de décès de 1911-1920" and from "La Commission centrale suisse pour la lutte antituberculeuse".

### The Trend of Tuberculosis Mortality in Switzerland.

The following table, which is arranged by quinquennial periods, gives the mortality rates by 100,000 of population of tuberculosis (all forms), tuberculosis of the lungs and other organs.

There is an additional column containing the mortality figures for the acute respiratory diseases.

**Table I.**

Mortality from Tuberculosis and Acute Respiratory Diseases in Switzerland by quinquennial periods during 1880-1920.

| Period | Deaths per 100,000 population from Tuberculosis of the lungs | Tuberculosis of other organs | All forms of tuberculosis | Acute respiratory diseases |
|---|---|---|---|---|
| 1881-1885 . . . . | 209 | 54 | 263 | 359 |
| 1886-1890 . . . . | 213 | 60 | 273 | 356 |
| 1891-1895 . . . . | 199 | 67 | 266 | 345 |
| 1896-1900 . . . . | 190 | 69 | 259 | 283 |
| 1901-1905 . . . . | 186 | 76 | 262 | 262 |
| 1906-1910 . . . . | 168 | 69 | 237 | 225 |
| 1911-1915 . . . . | 143 | 57 | 200 | 198 |
| 1916-1920 . . . . | 141 | 54 | 195 | 330 |

There is a distinct and steady decline of tuberculosis in the mortality rates of tuberculosis of the lungs from 1881 until 1920 by quinquennial periods, while, on the other hand, no distinct trend is indicated by the figures for tuberculosis for organs other than the lungs.

The rates for tuberculosis in general are irregular until 1901-05 and then show a steady decline.

The mortality from tuberculosis of all forms in Switzerland by single years since 1876 to 1920 is shown in Table II.

During the period 1876-1920, the yearly death-rate from all forms of tuberculosis fluctuated between the extreme rates of 289 per 100,000 in 1890 to the minimum of 180 in 1920. The variations were irregular until the year 1905. From this year on, with the exception of the war-years, the decline was continual.

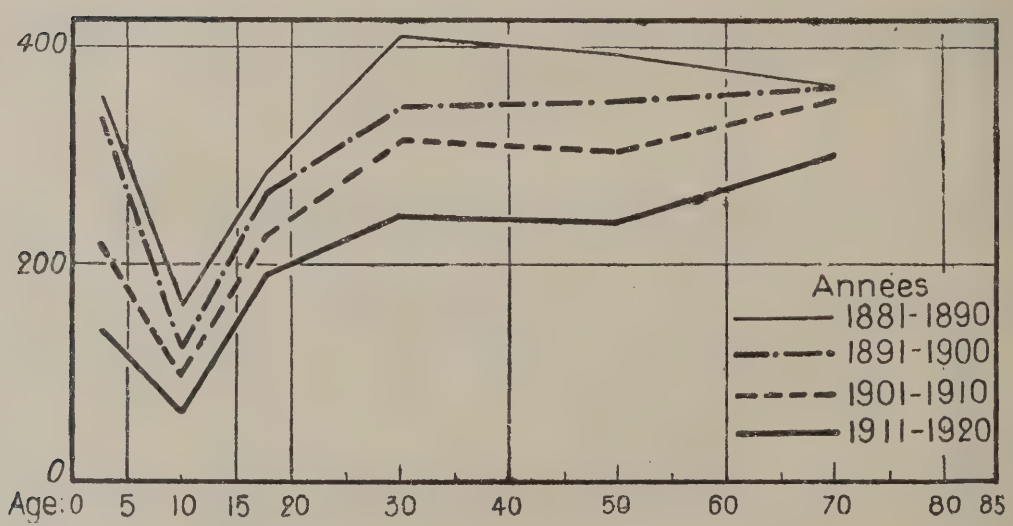
**Table II**

TUBERCULOSIS OF ALL FORMS IN SWITZERLAND.

| Year | Deaths | Rate per 100,000 | Year | Deaths | Rate per 100,000 |
|---|---|---|---|---|---|
| 1876 | — | — | 1899 | 7,932 | 243 |
| 1877 | 6,507 | 234 | 1900 | 8,981 | 272 |
| 1878 | 6,817 | 243 | 1901 | 8,920 | 267 |
| 1879 | 6,833 | 242 | 1902 | 8,840 | 261.1 |
| 1880 | 6,790 | 239 | 1903 | 9,033 | 263.5 |
| 1881 | 7,138 | 250 | 1904 | 9,233 | 265.9 |
| 1882 | 7,468 | 261 | 1905 | 9,437 | 268.5 |
| 1883 | 7,623 | 265 | 1906 | 8,948 | 251.3 |
| 1884 | 7,486 | 259 | 1907 | 8,866 | 246 |
| 1885 | 8,134 | 281 | 1908 | 8,627 | 236.6 |
| 1886 | 8,076 | 278 | 1909 | 8,566 | 232.1 |
| 1887 | 7,517 | 258 | 1910 | 8,487 | 227.2 |
| 1888 | 7,989 | 273 | 1911 | 8,233 | 218.1 |
| 1889 | 7,978 | 271 | 1912 | 7,833 | 205.1 |
| 1890 | 8,539 | 289 | 1913 | 7,788 | 201.6 |
| 1891 | 8,156 | 275 | 1914 | 7,591 | 194.8 |
| 1892 | 7,801 | 260 | 1915 | 7,365 | 189.7 |
| 1893 | 7,742 | 255 | 1916 | 7,429 | 191.3 |
| 1894 | 8,318 | 270 | 1917 | 8,047 | 207.1 |
| 1895 | 8,515 | 273 | 1918 | 7,799 | 201 |
| 1896 | 8,268 | 262 | 1919 | 7,730 | 199.8 |
| 1897 | 8,382 | 263 | 1920 | 6,984 | 180.1 |
| 1898 | 8,177 | 254 | | | |

DEATH-RATES FROM TUBERCULOSIS (ALL FORMS) FOR SWITZERLAND.

*(Both Sexes.)*

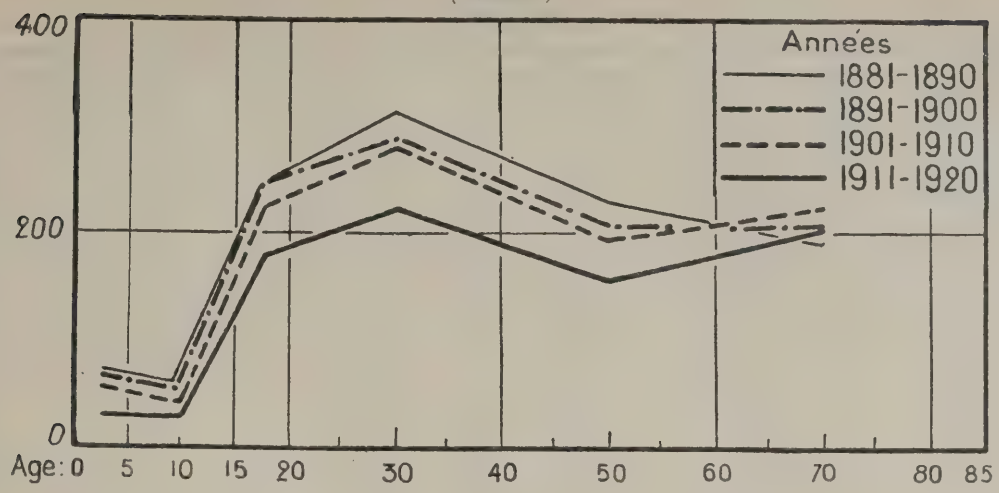



TUBERCULOSIS OF THE LUNGS.

Examination of the figures for tuberculosis of the lungs from the year 1876 onwards shows us that in 1890 again we have a maximum death-rate from this cause amounting to 225 per 100,000. The minimum figure of 130.8 was reached in 1920. During the period 1876-1890 there is an apparent increase.

From the years 1890-1905 there is a slight decline. However, the annual rates in this period of 30 years (1876-1905), fluctuating about the mean 200±3.4, display such a slight downward trend (s $\beta = 0.6 \pm 0.3$) that we can draw no conclusion whatever from such a decline. On the other hand, since 1905 the decline is evident, the yearly rates fluctuating about the mean 155 ± 4.3, the annual trend being — 3.26 ± 0.40.

DEATH-RATES FROM TUBERCULOSIS OF THE LUNGS FOR SWITZERLAND.
*(Females.)*




DEATH-RATES FROM TUBERCULOSIS OF THE LUNGS FOR SWITZERLAND.
*(Males)*

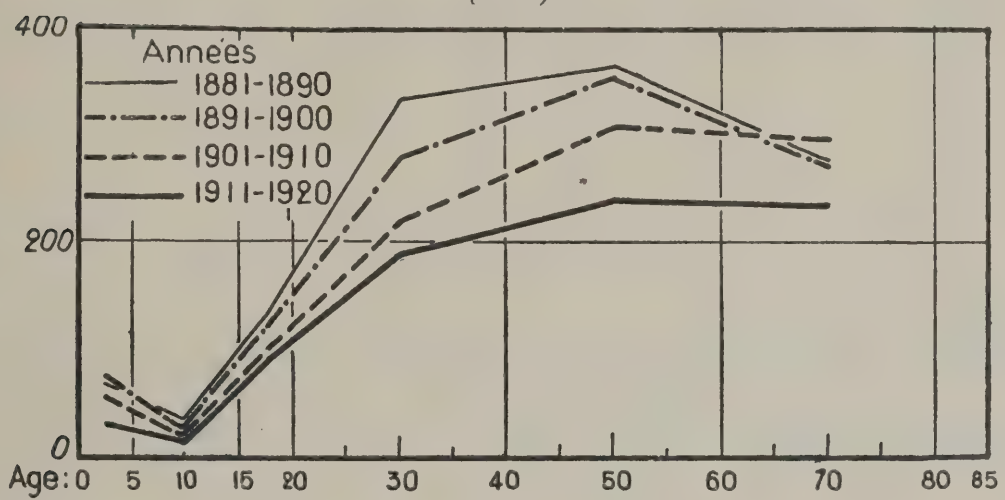



**Table III**

TUBERCULOSIS OF THE LUNGS.

| Year | Deaths | Rate per 100,000 | Year | Deaths | Rate per 100,000 |
|---|---|---|---|---|---|
| 1876 | 5,478 | 198 | 1899 | 5,823 | 178 |
| 1877 | 5,459 | 196 | 1900 | 6,692 | 203 |
| 1878 | 5,686 | 203 | 1901 | 6,241 | 186.8 |
| 1879 | 5,754 | 204 | 1902 | 6,280 | 185.5 |
| 1880 | 5,489 | 193 | 1903 | 6,380 | 186.1 |
| 1881 | 5,665 | 199 | 1904 | 6,452 | 185.8 |
| 1882 | 5,982 | 209 | 1905 | 6,630 | 188.6 |
| 1883 | 6,089 | 212 | 1906 | 6,407 | 180 |
| 1884 | 5,904 | 205 | 1907 | 6,063 | 168.2 |
| 1885 | 6,413 | 221 | 1908 | 6,150 | 168.6 |
| 1886 | 6,420 | 221 | 1909 | 6,008 | 162.8 |
| 1887 | 5,836 | 200 | 1910 | 6,011 | 160.9 |
| 1888 | 6,204 | 212 | 1911 | 5,872 | 155.5 |
| 1889 | 6,165 | 210 | 1912 | 5,495 | 143.9 |
| 1890 | 6,639 | 225 | 1913 | 5,467 | 141.5 |
| 1891 | 6,141 | 207 | 1914 | 5,375 | 137.9 |
| 1892 | 5,785 | 193 | 1915 | 5,268 | 135.7 |
| 1893 | 5,756 | 189 | 1916 | 5,188 | 133.6 |
| 1894 | 6,222 | 202 | 1917 | 5,728 | 147.4 |
| 1895 | 6,377 | 205 | 1918 | 5,753 | 148.3 |
| 1896 | 6,051 | 192 | 1919 | 5,663 | 146.4 |
| 1897 | 6,106 | 192 | 1920 | 5,072 | 130.8 |
| 1898 | 5,984 | 186 | | | |

From the year 1877, tuberculosis of all organs except the lungs shows the death-rate per 100,000 increasing from 38 in 1877 to 78.4 in 1905. In the following years, 1906-1920, the death-rate went down to 48.7, a decrease of roughly 40 per cent.

**Table IV.**

TUBERCULOSIS OF ALL ORGANS EXCEPT THE LUNGS.

| Year | Deaths | Rate per 100,000 | Year | Deaths | Rate per 100,000 |
|---|---|---|---|---|---|
| 1876 | — | — | 1899 | 2,109 | 65 |
| 1877 | 1,048 | 38 | 1900 | 2,289 | 69 |
| 1878 | 1,131 | 40 | 1901 | 2,603 | 77.9 |
| 1879 | 1,079 | 38 | 1902 | 2,494 | 73.7 |
| 1880 | 1,301 | 46 | 1903 | 2,586 | 75.4 |
| 1881 | 1,473 | 51 | 1904 | 2,715 | 78.2 |
| 1882 | 1,486 | 52 | 1905 | 2,755 | 78.4 |
| 1883 | 1,534 | 53 | 1906 | 2,508 | 70.4 |
| 1884 | 1,582 | 54 | 1907 | 2,765 | 76.7 |
| 1885 | 1,721 | 60 | 1908 | 2,420 | 66.4 |
| 1886 | 1,656 | 57 | 1909 | 2,504 | 67.8 |
| 1887 | 1,681 | 58 | 1910 | 2,438 | 65.3 |
| 1888 | 1,785 | 61 | 1911 | 2,291 | 60.7 |
| 1889 | 1,813 | 61 | 1912 | 2,269 | 59.4 |
| 1890 | 1,900 | 64 | 1913 | 2,272 | 58.8 |
| 1891 | 2,015 | 68 | 1914 | 2,157 | 55.4 |
| 1892 | 2,016 | 67 | 1915 | 2,061 | 53.1 |
| 1893 | 1,986 | 66 | 1916 | 2,221 | 57.2 |
| 1894 | 2,096 | 68 | 1917 | 2,289 | 58.9 |
| 1895 | 2,138 | 68 | 1918 | 2,025 | 52.2 |
| 1896 | 2,217 | 70 | 1919 | 2,039 | 52.7 |
| 1897 | 2,276 | 71 | 1920 | 1,890 | 48.7 |
| 1898 | 2,193 | 68 | | | |

MORTALITY FROM TUBERCULOSIS IN GENERAL.

This is included in Table V.

Tuberculosis mortality figures for all forms by ten-year periods show a steady decline from one period to another, from 274.6 in 1881-1890 to 265.2 in 1891-1900, 251.4 in 1901-1910 and 198.8 in 1911-1920. No conclusions can be drawn from the observations on miliary tuberculosis because the term "miliary tuberculosis" included, during the two first decennial periods, tuberculosis of the lymphatic glands. However, during the last two decennial periods, miliary tuberculosis declined from 10.2 to 6.1 (40 per cent.).

Tuberculosis of the respiratory tract (lungs, larynx and pleura) declined from 200 in the same period to 211.3, 194.5, 178.9, and 143.9.

Tuberculosis of the peritoneum and intestines increased until the last decennium from 5.7 to 8.7, and 9.8. In 1911-1920, however, it fell back to 7.4.

Tuberculosis of the brain and meninges remained practically constant at 27 per 100,000 for the three first decennia and dropped in the last to 18.4.

The figures apparently indicate an increase in tuberculosis of the urinary organs from 0.6 to 3.3 per 100,000. A similar and still more marked increase is noticeable in tuberculosis of the genital organs. (Development of the functional diagnostic of the urinary tract is probably the reason.) Tuberculosis of the joints and bones remained unchanged during the first two decennia (20) and declined to 16.4 and 13.4.

Yearly rates of tuberculosis mortality in its various forms can be obtained from 1911 onwards. During the ten-year period there is no evidence of any trend as shown by the rates of miliary tuberculosis, which fluctuate between a maximum of 7.2 in 1917 to 5.3 in 1914; these variations having a dubious statistical significance. With the exception of the war years, when a temporary rise was observed, the rates for pulmonary and laryngeal tuberculosis show a definite downward trend from 157.6 in 1911 to 132.3 in 1920.

**Table V.**

| Year | Population | Miliary Tuberculosis | Tuberculosis of the Respiratory Tract | Abdominal Tuberculosis | Cerebro-meningeal Tuberculosis | Tuberculosis of the genital organs | | Tuberculosis of the urinary tract | Tuberculosis of bones and joints | Tuberculosis of the lymph-glands | Scrofulosis | Tuberculosis of other organs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Males | Females | | | | | |
| 1911 | 3,775,620 | 6.2 | 157.6 | 8.2 | 22.0 | 1.08 | 0.52 | 3.5 | 14.30 | 2.8 | 1.8 | 0.76 |
| 1912 | 3,818,682 | 6.8 | 145.3 | 8.1 | 20.6 | 0.75 | 0.72 | 2.9 | 14.35 | 3.2 | 1.8 | 1.2 |
| 1913 | 3,863,964 | 6.2 | 143.7 | 8.7 | 20.7 | 0.52 | 0.55 | 3.1 | 13.40 | 2.8 | 1.3 | 1.0 |
| 1914 | 3,897,294 | 5.3 | 139.8 | 8.4 | 18.6 | 0.68 | 0.60 | 3.2 | 13.47 | 2.7 | 1.5 | 1.1 |
| 1915 | 3,882,829 | 5.4 | 137.2 | 7.5 | 18.6 | 0.58 | 0.65 | 3.0 | 12.46 | 2.9 | 0.9 | 1.2 |
| 1916 | 3,882,854 | 6.9 | 135.9 | 7.6 | 18.2 | 0.85 | 1.00 | 2.9 | 14.39 | 2.9 | 0.5 | 0.92 |
| 1917 | 3,887,494 | 7.2 | 149.9 | 7.8 | 18.7 | 0.90 | 0.69 | 3.6 | 14.01 | 3.2 | 0.7 | 0.77 |
| 1918 | 3,879,610 | 5.8 | 150.1 | 7.1 | 15.5 | 0.85 | 0.54 | 3.6 | 14.02 | 2.8 | 0.5 | 0.72 |
| 1919 | 3,869,160 | 5.7 | 148.2 | 6.6 | 17.4 | 0.85 | 1.05 | 3.7 | 11.96 | 3.5 | 0.7 | 0.95 |
| 1920 | 3,876,922 | 5.7 | 132.3 | 6.4 | 15.3 | 0.75 | 0.39 | 3.6 | 12.14 | 2.6 | 0.6 | 0.85 |

A slight downward trend is shown by the rate of 8.7 in 1913 to 6.4 in 1920 in abdominal tuberculosis [1]. Unlike the other forms of tuberculosis, abdominal tuberculosis does not show a rise during the war period.

Rates for cerebro-meningeal tuberculosis in the same period follow closely those of abdominal tuberculosis, the others declining regularly from 22 to 15.3. The small number of deaths from tuberculosis of the genital organs for both males and females deprives the rates of any significance.

There is no evidence of change in the rates for tuberculosis of the urinary tract. Equally constant are the rates for tuberculosis of the bones and joints, with the exception of the last two years, during which a slight decline is noticeable.

The mortality from the so-called tuberculosis of the lymph-glands does not show any significant change for the same period. Rates from scrofulosis show a distinct decline, but it is not possible to say whether this decline can be attributed to an actual decrease or to a change in the terminology used for certification.

## Tuberculosis Mortality by Sex.

### I. *Males.*

The analysis of yearly rates of pulmonary tuberculosis since 1901 shows a very definite downward trend, the maximum rate being 191.1 in 1901 and the minimum 120.6 in 1920. The regularity of this decline is marred by a slight rise in 1917, 1918 and 1919.

### II. *Females.*

As regards females, the same downward trend can be observed, with variations somewhat more irregular during the first decade, and with a more accentuated rise during the war, the maximum being 189.9 in 1904 and the minimum 131.6 in 1916. The rate reached 154 in 1918 and went down again to 140 in 1920.

If we compare the mortality of pulmonary tuberculosis for both sexes, we find that from 1901 to 1907 the rate was slightly higher in males than in females, and then the male rate declined faster and remained constantly below the female rate, the difference being especially great in the year 1911, during the war and in 1920, reaching in that year 20 per 100,000.

If we compare the mortality rates from other forms of tuberculosis in both sexes, we see that, throughout this 20-year period, the female rate remains constantly higher than the male rate, following closely, however, its downward trend and variations.

**Table VI.**

| Year | Tuberculosis of the lungs | | Scrofulosis | | Tuberculosis of other organs | |
|---|---|---|---|---|---|---|
| | Males | Females | Males | Females | Males | Females |
| 1900 | 208.6 | 197.2 | 1.5 | 1.8 | 68.5 | 70.8 |
| 1901 | 191.1 | 182.7 | 1.9 | 2.6 | 77.8 | 78.0 |
| 1902 | 186.7 | 184.4 | 1.5 | 2.4 | 71.3 | 75.9 |
| 1903 | 184.4 | 187.7 | 2.0 | 1.9 | 74.2 | 76.6 |
| 1904 | 184.5 | 189.9 | 1.8 | 2.0 | 74.1 | 82.1 |
| 1905 | 189.2 | 187.9 | 1.7 | 1.3 | 73.8 | 82.7 |
| 1906 | 176.4 | 173.8 | 1.1 | 0.7 | 65.6 | 71.2 |
| 1907 | 168.2 | 168.3 | 1.2 | 0.9 | 73.9 | 79.4 |
| 1908 | 167.1 | 170.1 | 1.6 | 1.5 | 63.5 | 69.1 |
| 1909 | 158.3 | 167.0 | 1.8 | 1.1 | 66.1 | 69.5 |
| 1910 | 160.9 | 160.9 | 1.0 | 1.0 | 62.6 | 67.8 |
| 1911 | 149.4 | 161.4 | 1.7 | 2.0 | 57.1 | 64.1 |
| 1912 | 143.6 | 144.2 | 2.0 | 1.6 | 59.3 | 59.5 |
| 1913 | 140.5 | 142.4 | 1.5 | 1.1 | 57.2 | 60.3 |
| 1914 | 136.4 | 139.4 | 1.7 | 1.3 | 52.5 | 58.1 |
| 1915 | 135.5 | 135.8 | 1.1 | 0.8 | 50.8 | 55.2 |
| 1916 | 135.7 | 131.6 | 0.5 | 0.6 | 55.4 | 58.9 |
| 1917 | 144.8 | 149.7 | 0.7 | 0.8 | 57.6 | 60.0 |
| 1918 | 141.8 | 154.4 | 0.7 | 0.4 | 48.9 | 55.3 |
| 1919 | 141.6 | 150.8 | 0.7 | 0.7 | 48.9 | 56.3 |
| 1920 | 120.6 | 140.4 | 0.7 | 0.4 | 46.3 | 51.0 |

[1] Statistics of Switzerland deal separately with tuberculosis of the peritoneum, of the intestines and the so-called *tabes mesenterica*.

**Table VII.**

DECLINE OF TUBERCULOSIS ACCORDING TO AGE GROUPS BY DECADES FROM 1881 TO 1920.

I. *All Forms.*

| Decades | Age Groups | | | | | |
|---|---|---|---|---|---|---|
| | 0–4 | 5–14 | 15–19 | 20–39 | 40–59 | 60 and over |
| 1881-1890 . . . . . | 355 | 159 | 284 | 413 | 383 | 361 |
| 1891-1900 . . . . . | 335 | 127 | 267 | 347 | 351 | 349 |
| 1901-1910 . . . . . | 240 | 97 | 233 | 315 | 305 | 361 |
| 1911-1920 . . . . . | 139 | 68 | 192 | 250 | 242 | 301 |

The above figures show, in all age groups, a definite downward trend.

II. *Tuberculosis of the Lungs.*

| | | | | | | |
|---|---|---|---|---|---|---|
| 1881-1890 . . . . . | 82 | 51 | 199 | 343 | 312 | 259 |
| 1891-1900 . . . . . | 77 | 41 | 187 | 288 | 286 | 250 |
| 1901-1910 . . . . . | 55 | 31 | 163 | 262 | 249 | 259 |
| 1911-1920 . . . . . | 31 | 21 | 135 | 208 | 199 | 216 |

The decline for tuberculosis of the lungs is quite comparable and closely parallel to the decline of all forms of tuberculosis.

III. *Tuberculosis of Organs other than the Lungs.*

| | | | | | | |
|---|---|---|---|---|---|---|
| 1881-1890[1] . . . . . | 273 | 108 | 85 | 70 | 71 | 102 |
| 1891-1900[1] . . . . . | 258 | 86 | 80 | 59 | 65 | 99 |
| 1901-1910 . . . . . | 184 | 66 | 70 | 53 | 56 | 102 |
| 1911-1920 . . . . . | 108 | 47 | 57 | 42 | 43 | 85 |

**Table VIII.**

COMPARATIVE ANALYSES OF THE RATES BY AGE GROUPS IN BOTH SEXES ARE GIVEN ONLY FOR THE LAST TWO DECADES (1901-1920).

| Decades | Age Groups | | | | | |
|---|---|---|---|---|---|---|
| | 0–4 | 5–14 | 15–19 | 20–39 | 40–59 | 60 and over |
| MALES. — *Tuberculosis of all Forms.* | | | | | | |
| 1901-1910 . . . . . | 245 | 78 | 159 | 295 | 368 | 393 |
| 1911-1920 . . . . . | 144 | 55 | 139 | 232 | 286 | 307 |
| *Tuberculosis of the Lungs.* | | | | | | |
| 1901-1910 . . . . . | 55 | 18 | 103 | 244 | 308 | 299 |
| 1911-1920 . . . . . | 31 | 13 | 91 | 192 | 243 | 235 |
| *Tuberculosis of Organs other than Lungs.* | | | | | | |
| 1901-1910 . . . . . | 190 | 60 | 56 | 51 | 59 | 94 |
| 1911-1920 . . . . . | 112 | 42 | 48 | 40 | 42 | 72 |
| FEMALES. — *Tuberculosis of all Forms.* | | | | | | |
| 1901-1910 . . . . . | 234 | 117 | 307 | 335 | 247 | 335 |
| 1911-1920 . . . . . | 133 | 81 | 244 | 266 | 202 | 296 |
| *Tuberculosis of the Lungs.* | | | | | | |
| 1901-1910 . . . . . | 55 | 44 | 224 | 280 | 194 | 226 |
| 1911-1920 . . . . . | 30 | 31 | 179 | 224 | 158 | 202 |
| *Tuberculosis of Organs other than Lungs.* | | | | | | |
| 1901-1910 . . . . . | 179 | 73 | 83 | 55 | 54 | 109 |
| 1911-1920 . . . . . | 103 | 51 | 65 | 42 | 44 | 94 |

[1] These rates have been computed by using the ratio between the number of deaths from tuberculosis of the lungs and deaths from other forms of tuberculosis in 1901-1910.

**Table IX.**

MORTALITY FROM TUBERCULOSIS OF DIFFERENT FORMS PER 100,000 POPULATION BY DECENNIAL PERIODS IN SWITZERLAND. FROM 1881 TO 1920.

| Nomenclature Number | Causes of deaths | 1881–1890 | | 1891–1900 | | 1901–1910 | | 1911–1920 | |
|---|---|---|---|---|---|---|---|---|---|
| | | Deaths | Rate per 100,000 inhabitants | Deaths | Rate per 100,000 inhabitants | Deaths | Rate per 100,000 inhabitants | Deaths | Rate per 100,000 inhabitants |
| 89 | Miliary and general tuberculosis: | | | | | | | | |
| | (*a*) including tuberculosis of lymphatic glands . | 1,418 | 4.9 | 2,685 | 8.6 | | | | |
| | (*b*) without tuberculosis of lymphatic glands . | — | — | — | — | 3,605 | 10.2 | 2,370 | 6.1 |
| 90 | Tuberculosis of lungs and larynx . . . . . | 61,317 | 211.3 | 60,937 | 194.5 | 62,622 | 177.0 | 54,881 | 142.0 |
| 91 | Tuberculosis: pleurisy . | | | | | 678 | 1.9 | 741 | 1.9 |
| 92 | Tuberculosis: peritonitis. | 823 | 2.8 | 1,526 | 4.9 | 1,949 | 5.5 | 1,758 | 4.6 |
| 93 | Tuberculosis of intestines | 869 | 2.9 | 1,190 | 3.8 | 1,538 | 4.3 | 1,078 | 2.8 |
| 94 | *Tabes mesaraica* . . . . | (See Scrofulosis) | | | | 238 | 0.7 | 121 | 0.3 |
| 95 | Tuberculous meningitis . | 7,763 | 26.8 | 8,765 | 27.9 | 9,639 | 27.2 | 7,003 | 18.1 |
| 96 | Tuberculosis of brain . . | | | | | 227 | 0.6 | 172 | 0.4 |
| 97 | Tuberculosis of urinary organs . . . . . | 184 | 0.6 | 579 | 1.8 | 1,015 | 2.9 | 1,285 | 3.3 |
| 98 | Tuberculosis of genital organs . . . . . | 42 (females only) | 0.1 | 50 | 0.2 | 270 | 0.8 | 281 | 0.7 |
| 99 | Tuberculosis of bones and joints: | | | | | | | | |
| | (*a*) including diseases of sight, hearing and acute and chronic arthritis . | 5,454 | 18.8 | 6,459 | 20.6 | | | | |
| | (*b*) without diseases of sight, hearing and acute and chronic arthritis . | — | — | — | — | 5,810 | 16.4 | 5,196 | 13.5 |
| 100 | Tuberculosis of lymphatic glands . . . . . | (1881 to 1900 included in miliary and general tuberculosis) | | | | 577 | 1.6 | 1,143 | 2.9 |
| 101 | Tuberculosis of other organs . . . . . | Lupus 78 | 0.3 | Lupus 81 | 0.3 | 242 | 0.7 | 366 | 0.9 |
| 102 | Scrofulosis: | | | | | | | | |
| | (*a*) including *tabes mesaraica* . . . . . | 1,748 | 6.0 | 794 | 2.5 | — | — | — | — |
| | (*b*) without *tabes mesaraica* . . . . . | — | — | — | — | 547 | 1.5 | 404 | 1.0 |
| | Total . . . | 79,696 | 274.7 | 83,066 | 265.2 | 88,957 | 251.4 | 76,799 | 198.8 |
| | Average population per year . . . . . (Arithmetical mean of the actual population as given in the "Mouvement de la population 1920") | 2,901,531 | | 3,132,496 | | 3,538,016 | | 3,863,442 | |

**Table X**

RATES OF TUBERCULOSIS MORTALITY PER 100,000 POPULATION BY CAUSES AND AGE GROUPS (1911-1920).

*Males.*

| Years | Age Groups | | | | | |
|---|---|---|---|---|---|---|
| | 0–4 | 5–14 | 15–19 | 20–39 | 40–59 | 60 and over |
| Miliary tuberculosis . | 8.1 | 3.2 | 6.6 | 6.7 | 7.4 | 5.8 |
| Tuberculosis | | | | | | |
| of lungs and larynx . | 30.7 | 12.6 | 88.6 | 188.9 | 239.5 | 229.6 |
| of pleura. . . . . | 0.4 | 0.7 | 2.3 | 2.8 | 3.7 | 5.0 |
| of peritoneum . . . | 3.2 | 2.8 | 4.8 | 3.5 | 3.5 | 4.4 |
| of intestine. . . . . | 3.2 | 1.4 | 1.8 | 2.2 | 3.3 | 2.6 |
| of mesanteric glands | 2.1 | 0.2 | | 0.1 | 0.2 | |
| of the meninges . . | 81.8 | 24.9 | 17.9 | 6.6 | 5.6 | 3.1 |
| of brain . . . . . | 1.1 | 0.5 | 0.4 | 0.3 | 0.3 | 0.2 |
| of urinary organs . | 0.2 | 0.4 | 2.3 | 6.2 | 5.5 | 5.8 |
| of genitals . . . . . | 0.1 | | 0.3 | 0.9 | 1.2 | 2.8 |
| of bones and joints . | 4.5 | 5.5 | 11.2 | 11.4 | 12.8 | 41.8 |
| of lymph glands . . | 7.7 | 2.7 | 2.9 | 1.8 | 1.7 | 3.4 |
| of other organs . . | 0.4 | 0.3 | 0.3 | 0.6 | 0.8 | 2.4 |

**Table XI**

RATES OF TUBERCULOSIS MORTALITY PER 100,000 POPULATION BY CAUSES AND AGE GROUPS (1911-1920).

*Females.*

| Years | Age Groups | | | | | |
|---|---|---|---|---|---|---|
| | 0–4 | 5–14 | 15–19 | 20–39 | 40–59 | 60 and over |
| Miliary tuberculosis . | 7.5 | 5.2 | 10.2 | 6.1 | 5.3 | 5.6 |
| Tuberculosis | | | | | | |
| of lungs and larynx. | 30.2 | 30.0 | 17.7 | 222.0 | 156.0 | 198.0 |
| of pleura. . . . . | 0.2 | 0.6 | 1.8 | 1.4 | 1.9 | 3.1 |
| of peritoneum . . . | 4.9 | 4.5 | 10.4 | 6.2 | 4.6 | 4.3 |
| of intestine. . . . . | 2.9 | 1.7 | 2.8 | 3.7 | 3.6 | 5.2 |
| of mesanteric glands | 1.4 | 1.8 | 0.4 | 0.2 | 0.2 | 0.2 |
| of the meninges . . | 72.0 | 29.6 | 25.3 | 7.9 | 3.9 | 2.2 |
| of brain . . . . . | 0.8 | 0.5 | 0.3 | 0.5 | 0.4 | 0.3 |
| of urinary organs . | 0.2 | 0.5 | 2.4 | 4.5 | 4.1 | 3.9 |
| of genitals . . . . . | | | 0.3 | 1.6 | 0.6 | 0.3 |
| of bones and joints . | 4.6 | 4.9 | 9.3 | 8.6 | 17.3 | 64.0 |
| of lymph glands . . | 8.3 | 3.5 | 4.1 | 2.0 | 1.9 | 3.3 |
| of other organs . . | 0.3 | 0.2 | 0.4 | 0.8 | 1.7 | 5.0 |

**Table XII**

RATES OF TUBERCULOSIS MORTALITY PER 100,000 POPULATION BY CAUSES AND AGE GROUPS (1911-1920).

*Both Sexes.*

| Years | Age Groups | | | | | |
|---|---|---|---|---|---|---|
| | 0–4 | 5–14 | 15–19 | 20–39 | 40–59 | 60 and over |
| Miliary tuberculosis . | 7.8 | 4.2 | 8.4 | 6.4 | 6.3 | 5.7 |
| Tuberculosis | | | | | | |
| of lungs and larynx. | 30.4 | 21.2 | 133.1 | 206.2 | 196.3 | 212.1 |
| of pleura. . . . . | 0.4 | 0.7 | 2.0 | 2.1 | 2.8 | 4.0 |
| of peritoneum . . . | 4.1 | 3.6 | 7.6 | 4.9 | 4.1 | 4.3 |
| of intestine. . . . . | 3.1 | 1.5 | 2.3 | 2.9 | 3.5 | 4.0 |
| of mesanteric glands | 1.7 | 0.2 | 0.2 | 0.1 | 0·2 | 0.09 |
| of meninges . . . . | 77.0 | 27.2 | 21.2 | 7.3 | 4.7 | 2.6 |
| of brain . . . . . | 1.0 | 0.5 | 0.3 | 0.4 | 0.4 | 0.3 |
| of urinary organs . | 0.2 | 0.4 | 2.3 | 5.2 | 3.6 | 4.7 |
| of genitals . . . . . | 0.02 | | 0.3 | 1.3 | 0.9 | 1.4 |
| of bones and joints . | 4.5 | 5.2 | 10.2 | 10.0 | 15.2 | 54.3 |
| of lymph glands . . | 8.0 | 3.1 | 3.5 | 1.9 | 1.8 | 3.3 |
| of other organs . . | 0.3 | 0.2 | 0.3 | 0.7 | 1.3 | 3.9 |

**Table XIII.**

MORTALITY FROM TUBERCULOSIS BY AGE GROUPS DURING THE DECENNIA 1881-1920, EXPRESSED EACH DECENNIUM IN TERMS OF THE MORTALITY OF THE DECENNIUM 1881-1890.

| Decades | Age Groups | | | | | |
|---|---|---|---|---|---|---|
| | 0–4 | 5–14 | 15–19 | 20–39 | 40–59 | 60 and over |
| I. *All forms of Tuberculosis.* | | | | | | |
| 1881-1890 . . . . . | 100 | 100 | 100 | 100 | 100 | 100 |
| 1891-1900 . . . . . | 94 | 80 | 94 | 84 | 92 | 97 |
| 1901-1910 . . . . . | 68 | 61 | 82 | 76 | 80 | 100 |
| 1911-1920 . . . . . | 39 | 43 | 68 | 61 | 63 | 83 |
| II. *Tuberculosis of the Lungs.* | | | | | | |
| 1881-1890 . . . . . | 100 | 100 | 100 | 100 | 100 | 100 |
| 1891-1900 . . . . . | 94 | 80 | 94 | 84 | 92 | 96 |
| 1901-1910 . . . . . | 67 | 61 | 82 | 76 | 80 | 100 |
| 1911-1920 . . . . . | 38 | 41 | 68 | 61 | 64 | 83 |
| III. *Tuberculosis of Organs other than the Lungs.* | | | | | | |
| 1881-1890 . . . . . | 100 | 100 | 100 | 100 | 100 | 100 |
| 1891-1900 . . . . . | 95 | 80 | 94 | 84 | 92 | 97 |
| 1901-1910 . . . . . | 67 | 61 | 82 | 76 | 80 | 100 |
| 1911-1920 . . . . . | 40 | 44 | 67 | 60 | 61 | 83 |

*Tuberculosis of all Forms.* — It may be seen from the above figures that there has been a considerable and steady decline in all age groups, the largest having been observed in the age groups 0-4 and 5-14 (61 and 57 per cent respectively), the smallest in the age group 60 and over (17 per cent).

Figures both for the tuberculosis of the lungs and of organs other than lungs display the same phenomenon in the above-stated age groups: the maximum decrease in the mortality occurred in early childhood (0-4), the minimum at the very advanced ages (60 and over).

The comparative analysis of the rates by age and sex for the decades 1901-1910 and 1911-1920 shows the following changes.

**Table XIV.**

*Tuberculosis of the Lungs.*

(Rate for each particular age group of each sex during the decennium 1901-1910 has been taken as 100.)

| Decades | | Age Groups | | | | | |
|---|---|---|---|---|---|---|---|
| | | 0–4 | 5–14 | 15–19 | 20–39 | 40–59 | 60 and over |
| 1901-1910 . . . | M. } F. } | 100 | 100 | 100 | 100 | 100 | 100 |
| 1911-1920 . . . | M. | 56 | 72 | 88 | 79 | 79 | 79 |
| | F. | 60 | 70 | 80 | 80 | 81 | 89 |
| *Tuberculosis of Organs other than the Lungs.* | | | | | | | |
| 1901-1910 . . . | M. } F. } | 100 | 100 | 100 | 100 | 100 | 100 |
| 1911-1920 . . . | M. | 59 | 70 | 86 | 78 | 71 | 77 |
| | F. | 58 | 70 | 78 | 76 | 81 | 86 |

The above figures indicate, regarding tuberculosis of the lungs, a decrease in the mortality during the decennium 1911-1920 as against the preceding ten years, this decrease being considerably higher for both males and females in the age groups 0-4 than in the remaining period of life; similar observations could be made of the mortality from tuberculosis of organs other than the lungs. There has been a slightly larger decrease in the mortality of tuberculosis of the lungs among males than among females in the age groups 0-4 and 60 and over, while in the age groups 15-19 a larger decrease has been observed among the females; the other age groups present differences which are statistically not significant.

Tuberculosis of organs other than the lungs shows, on the other hand, during the decennium 1911-1920 as compared with the preceding one, a larger decrease in the mortality among males than among females in the age groups 40-59, 60 and over, while the decrease in the age groups 15-19 has been larger for females; in other age groups the decrease has been practically the same.

**Table XV.**

MORTALITY OF TUBERCULOSIS OF ORGANS OTHER THAN THE LUNGS.
(Per 100,000 population.)

| Years | Age Groups | | | | | |
|---|---|---|---|---|---|---|
| | 0–4 | 5–14 | 15–19 | 20–39 | 40–59 | 60 and over |
| *Males:* | | | | | | |
| 1881-1890 | 156 | 58 | 42 | 35 | 40 | 61 |
| 1891-1900 | 183 | 63 | 56 | 43 | 50 | 71 |
| 1901-1910 | 190 | 60 | 56 | 51 | 59 | 94 |
| 1911-1920 | 112 | 42 | 48 | 40 | 42 | 72 |
| *Females:* | | | | | | |
| 1881-1890 | 144 | 59 | 46 | 31 | 36 | 69 |
| 1891-1900 | 173 | 70 | 72 | 45 | 45 | 87 |
| 1901-1910 | 179 | 73 | 83 | 55 | 54 | 109 |
| 1911-1920 | 103 | 51 | 65 | 42 | 44 | 94 |

MORTALITY OF TUBERCULOSIS OF THE LUNGS.

| | | | | | | |
|---|---|---|---|---|---|---|
| *Males:* | | | | | | |
| 1881-1890 | 72 | 32 | 131 | 334 | 363 | 275 |
| 1891-1900 | 75 | 24 | 121 | 279 | 352 | 270 |
| 1901-1910 | 55 | 18 | 103 | 244 | 308 | 299 |
| 1911-1920 | 31 | 13 | 91 | 192 | 243 | 235 |
| *Females:* | | | | | | |
| 1881-1890 | 68 | 60 | 245 | 320 | 229 | 195 |
| 1891-1900 | 65 | 52 | 244 | 288 | 209 | 207 |
| 1901-1910 | 55 | 44 | 224 | 280 | 194 | 226 |
| 1911-1920 | 30 | 31 | 179 | 224 | 158 | 202 |

**Table XVI.**

MORTALITY OF TUBERCULOSIS OF THE LUNGS DURING THE DECENNIA 1881-1920, EXPRESSED IN PERCENTAGE OF THE DECENNIUM 1881-1890.

| Years | Age Groups | | | | | |
|---|---|---|---|---|---|---|
| | 0–4 | 5–14 | 15–19 | 20–39 | 40–59 | 60 and over |
| *Males:* | | | | | | |
| 1881-1890 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1891-1900 | 104 | 75 | 92 | 84 | 97 | 98 |
| 1901-1910 | 76 | 56 | 79 | 73 | 85 | 109 |
| 1911-1920 | 43 | 41 | 69 | 57 | 67 | 85 |
| *Females:* | | | | | | |
| 1881-1890 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1891-1900 | 96 | 87 | 100 | 90 | 91 | 106 |
| 1901-1910 | 81 | 73 | 91 | 87 | 85 | 116 |
| 1911-1920 | 44 | 52 | 73 | 69 | 69 | 104 |

For tuberculosis of the lungs only, complete data being available for all four decennia 1881-1920 by ages for both sexes, the analysis shows, in the last decennium as compared with the decennium 1881-1890, the largest decrease in the age-groups 0-4 and 5-14, both in males and females. In the age-group 60 and over, among females there has even been a slight increase. All other age groups, both for males and females, show an evident decrease, this being slightly larger in males than in females.

## 7. Tuberculosis Statistics of Bavaria.

*Sources.* — The statistics presented in this Report have been extracted from the following official publications:

"Bericht über das Bayerische Gesundheitsverein."

"Der Stand des Tuberkulose Bekämpfung im Frühjahre 1920."

Some data have been received directly from the Director of the Statistical Office of the State of Bavaria in Munich.

**Table I.**

TUBERCULOSIS MORTALITY IN BAVARIA, 1885-1923.

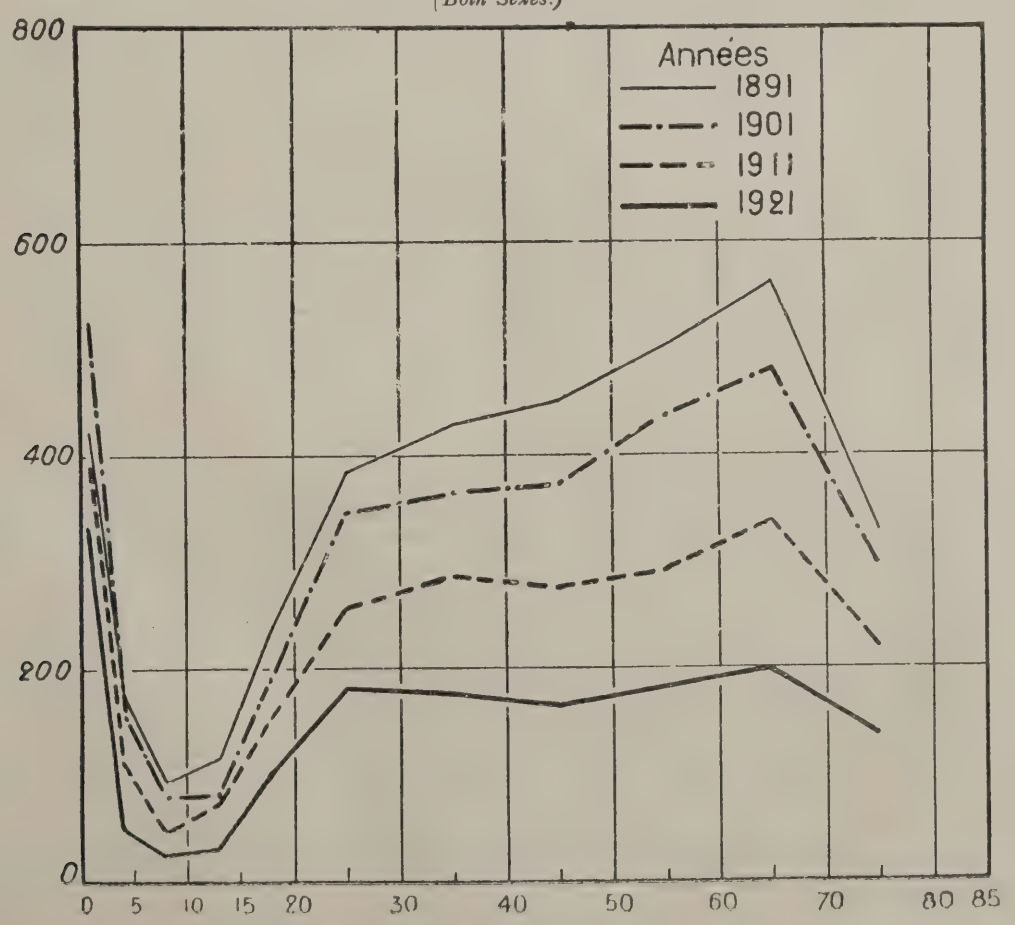
| Years | Tuberculosis (all forms) | | Pulmonary Tuberculosis | |
|---|---|---|---|---|
| | Number of Deaths | Rate per 100,000 | Number of Deaths | Rate per 100,000 |
| 1885 | 15,395 | 267 | 14,714 | 254 |
| 1895 | 18,043 | 311 | 16,396 | 283 |
| 1905 | 18,541 | 284 | 15,654 | 241 |
| 1910 | 15,342 | 223 | 12,908 | 187 |
| 1911 | 14,464 | 209 | 12,028 | 174 |
| 1912 | 13,512 | 193 | 11,195 | 160 |
| 1913 | 12,479 | 177 | 10,383 | 147 |
| 1914 | 12,434 | 174 | 10,338 | 145 |
| 1915 | 12,845 | 180 | 10,785 | 151 |
| 1916 | 13,825 | 194 | 11,674 | 164 |
| 1917 | 14,237 | 200 | 12,132 | 170 |
| 1918 | 14,522 | 204 | 12,536 | 176 |
| 1919 | 13,229 | 186 | 11,111 | 158 |
| 1920 | 10,800 | 151 | 8,951 | 123 |
| 1921 | 9,808 | 135 | 8,096 | 111 |
| 1922 | 10,162 | 130 | 8,403 | 109 |
| 1923 | 10,501 | 142 | — | — |

As we can see from Table I, since 1895 *tuberculosis (all forms)* shows a marked decline, and, with the exception of some annual variations and a slight increase during the war period 1915-1918, this decline has been continual.

The extreme rates were 311 per 100,000 in 1895 and 135 in 1921. From 1885 to 1921 the decline was about 50 per cent.

The curve of mortality from *pulmonary tuberculosis* has been practically parallel to the former except when its yearly variations were slightly higher. During the same period, 1885-1921, its decline was 55 per cent.

DEATH-RATES FROM TUBERCULOSIS FOR BAVARIA
*(Both Sexes.)*



## Decrease of Tuberculosis Mortality by Ages.

Tables II and III indicate that the decline of tuberculosis has been felt at all ages, but especially during childhood (from 2 to 15 years) and from 40 to 70 years. If one considers the decline of the death rate at each age, one sees that it has been general and regular since 1890 or thereabouts. The figures for tuberculosis mortality at the age 0-1 have increased, however, up to 1905 and declined since that date only. It is impossible to say whether this increase has been real or due only to an improvement in diagnosis.

*During the war* an increase in tuberculosis mortality showed itself in 1915 in the adult population (from 16 to 60 years), but it is only in the following year, 1916, that this increase extended to all ages, more especially to infants and in adults of 20-40 years. A diminution of tuberculosis at adult age began in 1917 and this was accentuated in 1918, extending then to all ages. In 1920 the death rate at all ages except under 5 had fallen back to the 1914 level.

**Tableau II. — Table II.**

Mortalité par tuberculose (toutes formes) pour les deux sexes, en Bavière (1888-1921).
(Taux par 100.000 habitants.)

Tuberculosis Mortality of All Forms for Both Sexes in Bavaria (1888-1921).
(Rate per 100,000 inhabitants).

| Ages | 1 | 2 | 3–5 | 6–10 | 11–15 | 16–20 | 21–30 | 31–40 | 41–50 | 51–60 | 61–70 | 71 et plus & over |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Années — Years | | | | | | | | | | | | |
| 1888 | 457 | 523 | 190 | 87 | 147 | 396 | 472 | 446 | 519 | 601 | 371 | — |
| 1889 | 436 | 476 | 166 | 79 | 88 | 211 | 397 | 448 | 426 | 496 | 531 | 320 |
| 1890 | 436 | 527 | 185 | 87 | 105 | 217 | 389 | 448 | 466 | 517 | 587 | 335 |
| 1891 | 422 | 553 | 176 | 94 | 117 | 235 | 387 | 429 | 451 | 501 | 560 | 328 |
| 1892 | 429 | 450 | 166 | 82 | 92 | 213 | 363 | 413 | 438 | 481 | 559 | 349 |
| 1893 | 506 | 470 | 157 | 83 | 93 | 249 | 376 | 422 | 432 | 499 | 532 | 325 |
| 1894 | 539 | 609 | 185 | 84 | 96 | 262 | 393 | 440 | 425 | 468 | 465 | 301 |
| 1895 | 523 | 549 | 166 | 83 | 101 | 224 | 354 | 405 | 430 | 448 | 501 | 296 |
| 1896 | 453 | 444 | 154 | 76 | 89 | 205 | 350 | 395 | 404 | 449 | 484 | 312 |
| 1897 | 549 | 520 | 158 | 88 | 90 | 213 | 360 | 399 | 390 | 459 | 486 | 283 |
| 1898 | 488 | 467 | 161 | 75 | 85 | 187 | 331 | 368 | 375 | 421 | 456 | 265 |
| 1899 | 521 | 458 | 169 | 77 | 74 | 177 | 343 | 383 | 388 | 415 | 457 | 261 |
| 1900 | 549 | 515 | 176 | 86 | 83 | 184 | 357 | 398 | 385 | 427 | 515 | 267 |
| 1901 | 524 | 440 | 157 | 81 | 81 | 191 | 344 | 364 | 373 | 438 | 481 | 298 |
| 1902 | 511 | 402 | 171 | 77 | 92 | 184 | 338 | 362 | 364 | 414 | 438 | 287 |
| 1903 | 527 | 444 | 138 | 79 | 83 | 186 | 335 | 359 | 364 | 405 | 481 | 267 |
| 1904 | 481 | 392 | 138 | 78 | 96 | 189 | 322 | 365 | 360 | 381 | 464 | 268 |
| 1905 | 570 | 361 | 151 | 82 | 91 | 198 | 335 | 403 | 364 | 387 | 460 | 286 |
| 1906 | 521 | 379 | 135 | 76 | 94 | 199 | 308 | 372 | 343 | 367 | 433 | 275 |
| 1907 | 464 | 312 | 126 | 71 | 85 | 182 | 287 | 371 | 341 | 351 | 432 | 284 |
| 1908 | 546 | 348 | 114 | 64 | 74 | 180 | 317 | 329 | 323 | 365 | 396 | 235 |
| 1909 | 522 | 313 | 122 | 70 | 72 | 165 | 284 | 304 | 303 | 336 | 394 | 227 |
| 1910 | 443 | 294 | 117 | 62 | 74 | 167 | 269 | 291 | 284 | 333 | 365 | 245 |
| 1911 | 390 | 257 | 110 | 48 | 74 | 154 | 255 | 287 | 277 | 293 | 339 | 219 |
| 1912 | 301 | 184 | 80 | 48 | 65 | 157 | 249 | 277 | 268 | 277 | 286 | 181 |
| 1913 | 268 | 171 | 70 | 47 | 62 | 141 | 230 | 249 | 248 | 260 | 268 | 156 |
| 1914 | 218 | 156 | 59 | 41 | 66 | 154 | 230 | 250 | 260 | 242 | 242 | 157 |
| 1915 | 179 | 142 | 51 | 55 | 59 | 158 | 235 | 263 | 274 | 258 | 240 | 150 |
| 1916 | 294 | 147 | 89 | 47 | 65 | 194 | 393 | 398 | 318 | 279 | 292 | 190 |
| 1917 | 241 | 121 | 73 | 48 | 59 | 182 | 351 | 350 | 311 | 277 | 292 | 167 |
| 1918 | 241 | 186 | 99 | 49 | 63 | 186 | 275 | 301 | 289 | 291 | 285 | 183 |
| 1919 | 273 | 180 | 132 | 45 | 82 | 173 | 203 | 233 | 249 | 253 | 270 | 148 |
| 1920 | 414 | 135 | 100 | 28 | 45 | 118 | 195 | 197 | 195 | 204 | 230 | 147 |
| 1921 | 334 | 186 | 50 | 27 | 34 | 104 | 180 | 177 | 165 | 179 | 200 | 138 |

**Tableau III. — Table III.**

Déclin de la mortalité tuberculeuse en Bavière depuis 1890 par groupes d'age.
Decline of the Tuberculosis Mortality in Bavaria since 1890 by Age Groups.

| Age Année — Year | 1 | 2 | 3-5 | 6-10 | 11-15 | 16-20 | 21-30 | 31-40 | 41-50 | 51-60 | 61-70 | Au delà Over |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1890 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1895 | 125 | 105 | 92 | 95 | 97 | 103 | 91 | 90 | 92 | 87 | 85 | 87 |
| 1900 | 127 | 98 | 93 | 99 | 79 | 85 | 91 | 88 | 83 | 82 | 87 | 80 |
| 1905 | 131 | 69 | 82 | 94 | 86 | 91 | 86 | 89 | 77 | 74 | 78 | 85 |
| 1910 | 103 | 56 | 64 | 71 | 70 | 77 | 69 | 65 | 61 | 64 | 62 | 73 |
| 1915 | 41 | 27 | 27 | 63 | 56 | 72 | 60 | 58 | 59 | 50 | 41 | 45 |
| 1920 | 95 | 26 | 54 | 32 | 43 | 54 | 50 | 44 | 42 | 40 | 39 | 44 |
| 1921 | 77 | 35 | 27 | 31 | 32 | 48 | 46 | 39 | 35 | 35 | 34 | 41 |
| Decline 1890-1921 | 23% | 65% | 73% | 69% | 68% | 52% | 54% | 61% | 65% | 65% | 66% | 38% |

## C.

## COMMENTS.

### General Character of the Tuberculosis Mortality Decline.

1. *Forms of tuberculosis.*

In the various countries considered, the decline has not taken place at the same rate and has not yet reached the same point, but in every one the pulmonary form has declined faster than any other.

2. *Period in which the decline took place.*

In spite of the fact that there are great differences in the dates at which the decline began in the various countries, the period of maximum decline has been everywhere in the last decennium, 1911-1921. The regularity of the decline in all countries, apart from its interruption during the war, is very striking. In some countries (England) the rate of decline is increasing.

3. *Decline according to sex.*

The decline has been parallel in both sexes in each country for the mortality from meningeal and abdominal tuberculosis. This strict parallelism has been maintained even when differences existed in the rates of both sexes.

This has not been the case for pulmonary tuberculosis, the evolution of which has differed in both sexes. The lack of parallelism of the decline in both sexes seems to have some relation to differences of environment and occupation (industrial employment of men for instance). In the Netherlands, since 1906, the male rate is lower then the female (13 per cent). In the city of Amsterdam, on the contrary, the male rate has constantly exceeded the female since 1875. In England and Wales, the female rate has fallen far below the male rate since 1860, the present difference between them being 20 per cent. In Scotland, the difference between both sexes is small, but the male rate has been slightly higher than the female since 1870. This difference is gradually increasing.

4. *Decline according to age.*

The common experience in the countries studied has been with minor exceptions:

(1) A marked drop in the mortality of infancy (age 0 to 1);
(2) A slight diminution between the ages of 5 to 14;
(3) A marked diminution in early adult ages.
(4) A flattening of the death-rate curve in adult age from 25 to 60.
(5) A retardation in the age of maximum tuberculosis mortality, this maximum changing from age 30 to age 60 in the last fifty years.
(6) A minor diminution or no change in old age, 75-80 and over.

## 8. Miscellaneous Statistics.

### Mortalité tuberculeuse en France 1906-1919.
### Tuberculosis Mortality in France, 1906-1919.

Taux pour 100.000 habitants. — Rates per 100,000.

| Ages | 0–1 | | | 1–10 | | | 20–39 | | |
|---|---|---|---|---|---|---|---|---|---|
| Années Years | Poumons Lungs | Autres formes Other forms | Total | Poumons Lungs | Autres formes Other forms | Total | Poumons Lungs | Autres formes Other forms | Total |
| 1906. . . . | 101 | 183 | 284 | 83 | 48 | 131 | 295 | 35 | 330 |
| 1907. . . . | 101 | 174 | 275 | 84 | 45 | 129 | 306 | 35 | 341 |
| 1908. . . . | 87 | 169 | 256 | 81 | 45 | 126 | 300 | 35 | 335 |
| 1909. . . . | 75 | 146 | 221 | 75 | 46 | 121 | 286 | 34 | 320 |
| 1910. . . . | 76 | 171 | 247 | 77 | 48 | 125 | 286 | 32 | 318 |
| 1911. . . . | 87,7 | 185 | 272 | 80 | 49 | 129 | 289 | 32 | 321 |
| 1912. . . . | 73,2 | 144 | 217 | 74 | 45 | 119 | 282 | 30 | 312 |
| 1913. . . . | 81,9 | 159 | 241 | 78 | 46 | 124 | 278 | 31 | 309 |
| 1914. . . . | 91,3 | 163 | 254 | 70 | 38 | 108 | 257 | 28 | 285 |
| 1915. . . . | 108 | 220 | 328 | 71 | 37 | 108 | 240 | 31 | 271 |
| 1916. . . . | 113 | 172 | 285 | 71 | 38 | 109 | 227 | 28 | 255 |
| 1917. . . . | 103 | 167 | 271 | 79 | 37 | 116 | 225 | 23 | 248 |
| 1918. . . . | 200 | 294 | 494 | 70 | 33 | 103 | 234 | 29 | 263 |
| 1919. . . . | 70,5 | 154 | 234 | 65 | 32 | 97 | 215 | 30 | 245 |
| | 40-50 | | | 60 et plus — and over | | | Total | | |
| 1906. . . . | 225 | 31 | 256 | 104 | 24 | 128 | 182 | 40 | 222 |
| 1907. . . . | 240 | 31 | 271 | 111 | 25 | 136 | 190 | 39 | 229 |
| 1908. . . . | 235 | 32 | 267 | 105 | 23 | 138 | 186 | 38 | 224 |
| 1909. . . . | 228 | 31 | 259 | 103 | 22 | 125 | 178 | 37 | 215 |
| 1910. . . . | 229 | 20 | 255 | 102 | 18 | 120 | 179 | 36 | 215 |
| 1911. . . . | 223 | 26 | 249 | 105 | 22 | 127 | 180 | 36 | 216 |
| 1912. . . . | 226 | 27 | 253 | 101 | 19 | 120 | 176 | 35 | 211 |
| 1913. . . . | 227 | 26 | 253 | 103 | 22 | 125 | 177 | 36 | 213 |
| 1914. . . . | 212 | 27 | 239 | 96 | 21 | 117 | 179 | 36 | 215 |
| 1915. . . . | 212 | 25 | 237 | 99 | 20 | 119 | 188 | 38 | 226 |
| 1916. . . . | 203 | 26 | 229 | 101 | 22 | 123 | 184 | 38 | 222 |
| 1917. . . . | 195 | 25 | 220 | 104 | 26 | 130 | 185 | 38 | 223 |
| 1918. . . . | 190 | 15 | 205 | 100 | 22 | 122 | 189 | 37 | 226 |
| 1919. . . . | 179 | 25 | 204 | 87,7 | 22 | 109 | 167 | 34 | 201 |

General and Tuberculosis Mortality in the German Empire per 100,000, 1892–1921.

| Years | Pulmonary Tuberculosis | Acute Miliary Tuberculosis | Tuberculosis of all other organs | Death rate from all causes |
|---|---|---|---|---|
| 1892 . . | 207 | | 15 | 2.425 |
| 1893 . . | 243 | | 18 | 2.473 |
| 1894 . . | 237 | | 18 | 2.241 |
| 1895 . . | 230 | | 19 | 2.227 |
| 1896 . . | 216 | | 19 | 2.091 |
| 1897 . . | 212 | | 19 | 2.137 |
| 1898 . . | 196 | | 19 | 2.063 |
| 1899 . . | 201 | | 18 | 2.151 |
| 1900 . . | 206 | | 19 | 2.211 |
| 1901 . . | 192 | | 19 | 2.067 |
| 1902 . . | 187 | | 19 | 1.946 |
| 1903 . . | 186 | | 21 | 1.997 |
| 1904 . . | 182 | | 21 | 1.957 |
| 1905 . . | 179 | 2 | 24 | 1.981 |
| 1906 . . | 162 | 2 | 23 | 1.820 |
| 1907 . . | 159 | 2 | 22 | 1.803 |
| 1908 . . | 154 | 2 | 22 | 1.806 |
| 1909 . . | 144 | 2 | 22 | 1.717 |
| 1910 . . | 140 | 2 | 21 | 1.619 |
| 1911 . . | 137 | 2 | 21 | 1.729 |
| 1912 . . | 131 | 2 | 20 | 1.554 |
| 1913 . . | 122 | 2 | 19 | 1.499 |
| 1914 . . | 122 | 2 | 18 | 1.906 |
| 1915 . . | 128 | 2 | 18 | 2.145 |
| 1916 . . | 139 | 2 | 21 | 1.926 |
| 1917 . . | 180 | 2 | 24 | 2.035 |
| 1918 . . | 202 | 2 | 25 | 2.468 |
| 1919 . . | 182 | 3 | 27 | 1.556 |
| 1920 . . | 130 | 2 | 22 | 1.507 |
| 1921 . . | 116 | 2 | 19 | 1.389 |

Mortality of Tuberculosis in Germany during the War Years, by Age Groups.

*(Rates per* 100,000.)

| Ages | 1914 | 1915 | 1916 | 1917 | 1918 | 1919 |
|---|---|---|---|---|---|---|
| 0 . . . | 193 | 166 | 173 | 202 | 196 | 198 |
| 1–4 . . | 80 | 87 | 101 | 113 | 129 | 168 |
| 5–14 . . | 46 | 49 | 56 | 70 | 76 | 76 |
| 15–29 . . | 171 | 181 | 194 | 254 | 297 | 269 |
| 30–59 . . | 189 | 195 | 210 | 266 | 291 | 250 |
| 60–69 . . | 210 | 213 | 238 | 290 | 299 | 280 |
| 70 . . . | 133 | 136 | 155 | 175 | 182 | 168 |
| All ages . . | 143 | 148 | 162 | 206 | 230 | 211 |

Mortalité tuberculeuse en Prusse de 1909 a 1921 d'après l'age et le sexe.

(Taux par 100.000.)

Mortality of Tuberculosis in Prussia during 1909-1921, by ages and sex.

(Per 100.000.)

| Ages | 0 | | 1 | | 2 | | 3–4 | | 5–9 | | 10-14 | | 15-19 | | 20–24 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Années — Years | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. |
| 1909–13 . . . . | 226,2 | 185,7 | 153,0 | 134,6 | 87,0 | 82,5 | 59,1 | 59,3 | 38,4 | 48,2 | 39,3 | 67,1 | 119,3 | 147,7 | 196,7 | 194,6 |
| 1914 . . . . | 191,8 | 159,9 | 126,9 | 117,6 | 72,2 | 71,7 | 48,1 | 52,9 | 37,9 | 44,2 | 38,7 | 64,2 | 127,0 | 143,3 | 191,3 | 185,2 |
| 1915 . . . . | 146,6 | 108,6 | 121,7 | 109,2 | 81,2 | 73,8 | 53,2 | 64,3 | 39,6 | 48,8 | 39,4 | 72,2 | 138,4 | 161,1 | 203,1 | 194,9 |
| 1916 . . . . | 113.6 | 96.1 | 127,1 | 116,4 | 93,7 | 85,4 | 67,6 | 71,6 | 44,4 | 47.8 | 51,3 | 82,7 | 160,9 | 180,8 | 204,9 | 216,4 |
| 1917 . . . . | 211,6 | 185,6 | 192,4 | 177,2 | 147,3 | 155,4 | 88,7 | 92,4 | 59,4 | 77,0 | 59,9 | 102,8 | 233,5 | 237,3 | 294,8 | 269,1 |
| 1918 . . . . | 195,1 | 168,1 | 195,6 | 184,9 | 139,9 | 134,1 | 98,5 | 110,4 | 62,2 | 84,9 | 63,7 | 111,2 | 277,4 | 286,0 | 354,3 | 328,8 |
| 1919 . . . . | 205,4 | 194,4 | 228,2 | 210,3 | 211,8 | 205,2 | 139,3 | 149,7 | 69,4 | 94,8 | 64,7 | 116,8 | 276,1 | 268,7 | 331,8 | 283,8 |
| 1920 . . . . | 186,3 | 140,2 | 170,3 | 150,5 | 111,4 | 96,3 | 82,0 | 84,8 | 47,3 | 66,7 | 44,2 | 78,0 | 169,5 | 181,5 | 249,3 | 217,2 |
| 1921 . . . . | 180,0 | 153,2 | 106,6 | 96,1 | 83,4 | 76,5 | 57,5 | 58,3 | 37,0 | 44,5 | 35,8 | 58,6 | 131,8 | 145,5 | 237,6 | 184,8 |

Tuberculosis mortality in Spain, 1908-1923.

(Per 100,000 inhabitants.)

| Years | Pulmonary tuberculosis | All forms of tuberculosis |
|---|---|---|
| 1908 . . . . . | 135.9 | 177.8 |
| 1909 . . . . . | 125.3 | 162.6 |
| 1910 . . . . . | 123.6 | 156.9 |
| 1911 . . . . . | 122.4 | 157.2 |
| 1912 . . . . . | 116.7 | 147.9 |
| 1913 . . . . . | 120.0 | 151.8 |
| 1914 . . . . . | 123.3 | 154.7 |
| 1915 . . . . . | 127.6 | 159.5 |
| 1916 . . . . . | 129.8 | 164.0 |
| 1917 . . . . . | 136.8 | 171.4 |
| 1918 . . . . . | 162.3 | 201.3 |
| 1919 . . . . . | 141.2 | 178.1 |
| 1920 . . . . . | 150.9 | 185.7 |
| 1921 . . . . . | 125.9 | 156.9 |
| 1922 . . . . . | 126.9 | 155.4 |
| 1923 . . . . . | 126.2 | 154.6 |

## Part III. — CONCLUSIONS AND SUGGESTIONS FOR FURTHER INVESTIGATION.

This preliminary report is intended first to show whether or not a decline of tuberculosis mortality has actually taken place in several countries. The statistical data presented in Part II establish beyond doubt the reality of this decline. Subsequently, an attempt was made to ascertain whether a comparative international study of statistics was possible and could shed light on the cause of this decline. A report by Professor Rosenfeld shows the possibility of comparing the tuberculosis mortality statistics of certain countries, in spite of difficulties and pitfalls to which he directs attention. It was, meanwhile, deemed necessary to review briefly the opinions held as to the causes of the decline observed. This was done in order to see which of them seemed to explain best the statistical facts and which of the causes mentioned could best lend themselves to statistical analysis and measurement. The necessity for a limitation of the investigation is obvious in a field including practically the whole epidemiology of tuberculosis. After a review of the possible and probable causes of the decline, the following points were retained for consideration as having an important bearing on the problem and, at the same time, being of comparatively easy statistical approach.

(1) *A comparative study of the tuberculosis death rate and the death rate from all causes.* The general death rate reflects the general state of health of the population, which, in turn, is markedly affected by general environmental conditions.

A close relationship between both would tend to indicate the importance of environmental factors and the general state of health on tuberculosis mortality, as compared with direct results achieved by specific anti-tuberculosis measures.

Comparison by ages and sex for the various countries, and at different periods, of the tuberculosis and general mortality would show co-variation (if it exists), both in space and time. This could be easily measured and expressed mathematically.

(2) The specific action of food as a builder of resistance to tuberculosis could be investigated by a comparison in various countries and during various periods of time, the war notably, of the *per capita* consumption of certain staple food products. The co-variation between this food consumption and tuberculosis mortality being an index of the importance of the food factor in tuberculosis mortality:

Necessary data might be obtained from the publications of the Departments of Commerce and Agriculture of various countries and for the cities, Paris for instance, from the toll statistics.

(3) A comparative study of the tuberculosis mortality of infancy and childhood, with milk consumption and control, is very desirable because of the many issues at stake.

Comparison could be made of countries where:

No cow's milk is consumed (Japan, Dalmatia);
Milk is not controlled, but is generally boiled before consumption (France);
Milk is neither controlled nor boiled;
Milk is effectively controlled (by herd testing) and wholesale pasteurisation (Denmark, some large American and Canadian cities).

(4) The specific influence of industrial work as distinct from the effect of city life could be to a certain extent measured by a study of the differences shown by the male and female tuberculosis mortality rates, according to the extent of industrial employment of the men. It is assumed that in agricultural life men and women share the same home life and largely the same kind of work.

This study should be made specifically by age groups. It should include comparison of the differences existing between male and female rates, in:
rural and urban districts;
in non-industrial and industrial countries;
in individual countries before and after the beginning of the era of industrialism.

(Labour and industrial statistics could furnish the necessary data concerning the industrial employment of men, and for recent years of women.)

(5) A comparative study of the amount of anti-tuberculosis work done and its cost, in countries where the decline has taken place, and in others where it has not taken place, would be a preliminary but essential step in the evaluation of the effect of the anti-tuberculosis campaign.

The most important anti-tuberculosis measures hitherto adopted are concerned with:

(1) Dispensaries;
(2) Hospitals;
(3) Sanatoria;
(4) Associated services (social and visiting nursing services, preventoria, open-air schools, summer camps, health education, and so forth).

A study should be made of the absolute, relative and *per capita* cost of these activities, perhaps restricting the enquiry to dispensaries and sanatoria, as these are the weapons which appear to have been most effective in the part and, at the same time, more susceptible of evaluation and comparison.

C.H. Malaria 45 (*d*).

**Annex 52.**

# ENQUIRY INTO THE RESIDUAL ALKALOIDS OF QUININE.

*Report by the Chairman of the Malaria Commission.*

The Health Committee of the League of Nations, with the object of facilitating the extension of the anti-malaria campaign to all infected countries, believes that one of the most effective means of arriving at this result consists in lowering the price of the treatment of malaria patients.

With this object in view, the Health Committee would ask the specialists who are good enough to help in the work to reply to the questions which have been put to them regarding the residual alkaloids of quinine. In order that the results coming from different sources may be comparable, the investigators are asked to adhere as closely as possible to the rules that have been drawn up. It need hardly be said that there is no intention of limiting scientific investigations carried out by scientists; on the contrary, the Committee will be glad to be informed of the work which they may be able to undertake with regard to this matter outside the defined limits of the enquiry which they are asked to undertake. The practical aim of the enquiry must be kept in mind. If certain alkaloids of quinine and in particular that which, in addition to quinine, is the most abundant in the bark, namely, cinchonine, or if the total alkaloids obtained by the most simple methods of extraction are effective in the treatment of malaria, it is evident that the same quantity of cinchona bark will give us a larger quantity of an active drug and at a lower cost.

The Health Committee further asks the malariologists concerned to fill up the forms which have been sent them. Moreover, it would be of interest, for economic reasons, to learn the mean minimum dose of each of the remedies used which is able to cause the disappearance of all parasites from the peripheral blood.

It is obvious that the number of patients submitted to treatment should be sufficient to justify deductions being drawn; it is suggested, therefore, that at least 30 patients should be used to test the efficacy of each drug.

No special selection of the patients should be made; they should be taken in the order in which they present themselves for treatment: *e.g.*, the first should be treated with quinine (control), the second with cinchonine, the third with total alkaloids, and so on. The only necessary condition is that each patient should have in his blood a large number of schizonts in evolution and so liable to an acute attack of malaria.

The drugs to be used in this enquiry will be distributed to the specialists by the Central Bureau of their country on behalf of the Health Organisation of the League of Nations. These products will come from a stock analysed or purified by a competent laboratory and of which each specialist will receive one part. In this way, the results obtained should be perfectly comparable.

It is advisable that these same experiments should be carried out with the three forms of malaria: tertian, quartan and tropical.

It is evident that it would be extremely interesting to receive precise information regarding the efficacy of these same products from the point of view of epidemiology and prophylaxis and from the point of view of their ability to arrest early and late relapses, to know something as to their action on sporozoites, on the diminution in the size of the spleen and their efficacy in infantile malaria. Questions relating to toxicity, tolerance or intolerance, the action on the uterine muscle, comparative hemolytic activity, renal elimination, absorption and elimination, etc., are of the greatest interest from the therapeutic point of view, but these matters are only put forward as suggestions and the Health Committee of the League of Nations, although it would be glad to receive the result of researches carried out in these directions, emphasises once more the primary importance of filling in the forms and carrying out the simple instructions attached thereto.

C. H. Malaria 45 (e) (1).

Order No.

# MALARIA TREATMENT FORM.

**Name and address of hospital**

**Name of Physician in charge of patient**

Nature of attack (primary infection, relapse or reinfection) .....

Nature of previous anti-malaria treatment, if any

Name of patient ..... Number of case ..... Weight of patient on admisssion ... kilos

Drug used ..... Dose given: (1) Per kilo. of body weight ... (2) Actual dose

| | Date | Number of dose | Dose and method of administration | Time at which given | Time of taking blood film | Temperature of patient at the same time | Label on blood film | Toxic Effects.—Reply by inserting either Yes or No in each column, giving the time of the first appearance of the symptom | | | | | | | Other toxic effects to be described in detail |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Nausea | Vomiting | Buzzing in the ears | Disturbance of vision | Vertigo | Diarrhœa | Albuminuria | |
| 1 | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | |

## Results of the Microscopic Examination.

| Films made after administration of the | Trophozoits | Schizonts | Gametocytes | Remarks |
|---|---|---|---|---|
| The 1st dose . . . . . | | | | |
| ,, 2nd ,, . . . . . | | | | |
| ,, 3rd ,, . . . . . | | | | |
| ,, 4th ,, . . . . . | | | | |
| ,, 5th ,, . . . . . | | | | |
| ,, 6th ,, . . . . . | | | | |
| ,, 7th ,, . . . . . | | | | |
| ,, 8th ,, . . . . . | | | | |
| ,, 9th ,, . . . . . | | | | |
| ,, 10th ,, . . . . . | | | | |

(Signed) ..... *Physician in charge*



## SCHEME OF A CLINICAL ENQUIRY AS TO THE RELATIVE THERAPEUTIC VALUE OF CINCHONINE AND OF THE TOTAL ALKALOIDS OF CINCHONA BARK IN COMPARISON WITH QUININE.

1. *The supply of quinine and other alkaloids.*

The Malaria Commission of the Health Organisation of the League of Nations is undertaking a comparative test of the therapeutic value of quinine as compared with

*(a)* Cinchonine;

*(b)* Total alkaloids (including quinine).

For these tests, the material will be distributed by the Health Section to the chiefs of the centres in each country where the enquiry is being carried out. The Health Section, will take care, in agreement with the special permanent Sub-Committee, to have these products submitted to chemical and physical analysis, etc.

2. *Method of carrying out the enquiry.*

It is considered that the only criterion likely to give good results is that which is based on the immediate therapeutic efficacy of the different alkaloids administered to patients in hospital whose blood contains malaria parasites at the time when the experiment is carried out. The investigation should be carried out as follows :

*(a)* The patient should be weighed and the drug should be given to him by mouth, with every care that it is absorbed and if possible in solution. The dose of the drug should be equivalent to one gram of quinine per day for each 70 kilos. of body weight. A similar method should be employed with the other alkaloids.

*(b)* Only patients suffering from the acute form of the disease and with schizonts circulating in the blood should be treated. Arrangements should be made to give a half dose each morning on an empty stomach and a half dose before the evening meal. A blood film should be made from each patient each time that the drug is administered.

*(c)* The administration of the drug and the examination of the blood should be continued until 5 total doses corresponding to 5 grams of quinine have been taken. After the first series of experiments, an attempt will be made to decide as to what dose of the drug corresponds to one gram of quinine from the point of view of therapeutic value.

*(d)* Careful note should be taken of secondary effects, such as nausea, albuminuria, etc.

*(e)* A comparison of the different drugs will be made according to the time necessary to cause the entire disappearance from the blood of schizonts, in so far as the examination of blood films will enable one to determine this. These blood examinations should be made by the same observer, using the same technique throughout the duration of the enquiry.

*(f)* It is desirable that the experiment should be carried out on groups of **THIRTY** patients for each drug taken without selection.

*(g)* Information regarding dosage, symptoms and the results obtained, should be inscribed on the back of the special forms furnished by the Health Organisation of the League of Nations.

*(h)* The nature of attack should be determined, in so far as this is possible. Above all, it is desirable to know whether it is a primary attack or a relapse.

The description of previous anti-malaria treatment should be inserted on the back of the form.

## REMARKS

C. H. Malaria 48.

**Annex 52a.**

## DISTRIBUTION OF QUININE IN ALBANIA.

*Report by Dr. W. Haigh.*

The Council, at its meeting in September 1924, decided to utilise the outstanding balance of the Albanian Famine Relief Fund (some 10,000 francs) for the purchase of quinine, to be distributed by Dr. Haigh, who was at that time undertaking a malaria survey of the country for the Health Organisation of the League of Nations at the request of the Albanian Government.

Immediate steps were taken to give effect to this resolution and, through the intermediary of the Italian Finance Ministry (Industrial Monopolies), some 97 kilograms of quinine were purchased and despatched to Durazzo towards the end of October.

To ensure satisfactory administration and distribution, Dr. Haigh successfully negotiated with the Albanian Government for the nomination and payment of a number of selected doctors with whom he was able to discuss and agree on the system and procedure of distribution to be employed. In view of the recent disorganisation of the public health services in Albania, certain guarantees were essential, and a trustworthy chain of distribution, working to a uniform plan (which was laid down in a circular letter), was arranged.

An attempt was made to obtain the co-operation of the school authorities in selected towns and to secure the services of reliable doctors in selected villages in their districts, which villages would serve not only as "controls" against untreated villages, but as demonstrations to the latter.

It was decided to proceed with the distribution at once, while yet the autumn malaria season was a vivid memory. Issues were therefore made in certain selected zones to all the school-children having had malaria during the year, as well as to certain adults in refugee camps and elsewhere. The treatment is continued for some six weeks and the condition (notably the spleen index) of the sample groups determined before and afterwards. It is hoped that the results will serve not only to stimulate the application of the system to other infected areas and the employment of malaria ambulances, but — by reason of the close co-operation of the school teachers and the visiting doctors — to lay the foundation of a future school medical service. Distribution is being carried out, through the collaboration of local personnel, in the schools of Scutari, Durazzo, Kavaya, Berat, Fieri, Argyrocastro and Delvino; among the refugees in Kavaya district; in Alessio; in groups of villages centred in Scutari, Durazzo, Kavaya, Berat, Fieri, Valona, Bemcha, and in the Musakya and Vivari plains. A supply has been allocated to the district of Kruma, to the municipal clinics of Durazzo and Valona, and to the Red Cross Centre at Tirana, where reserves are maintained for future calls.

It is gratifying to record the willing co-operation of the doctors, school masters and others who have undertaken the programme, but its successful accomplishment will lie not least with the Albanian Government, which has expressed its approval and undertaken the remuneration of the extra personnel engaged. It would appear that the Government really appreciates the value of this experimental work as a nucleus of a future anti-malaria service.

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C. H. Malaria 37.

**Annex 52b.**

## NOMINATION OF A MALARIOLOGIST TO ASSIST THE TURKISH GOVERNMENT IN THE CREATION OF AN ANTI-MALARIA ORGANISATION IN TURKEY.

*Note from the Turkish Legation.*

[*Translation.*] Berne, January 9th, 1925.

The Turkish Legation has the honour to ask the Secretariat-General of the League of Nations to recommend to it, through the intermediary of the Health Section, a well-known expert in malaria for the purpose of creating in Turkey an anti-malaria organisation and, in case of need, to carry out an inspection of the areas affected so that the Government may profit by his knowledge in these matters.

*Letter from the Secretary-General of the League to the Turkish Legation at Berne.*

[*Translation.*] Geneva, February 14th, 1925.

The Secretary-General has the honour to acknowledge receipt of the note of the Turkish Legation (C.L. 9004/S.L./179), dated January 9th, 1925, in which the Legation has asked the Secretariat-General to recommend to it, through the intermediary of the Health Organisation of the League of Nations, an expert who would be able to advise the Government regarding the creation in Turkey of an anti-malaria organisation which might eventually entail an inspection of the malarious regions.

The request of the Turkish Government will be placed on the agenda of the forthcoming session of the Malaria Commission of the Health Committee of the League of Nations, which will take place on March 16th next.

The selection of an expert depending on the sanitary condition of the areas in which these anti-malaria measures are likely to be carried out, it would be very desirable to obtain more detailed technical information on the extent of malaria in Asia Minor and of the sanitary organisation of the country.

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C. H. 320.

**Annex 53.**

## WORK OF THE FAR EAST COMMISSION

*Report by Dr. Jitta, adopted by the Committee on April 23rd, 1925.*

### The Singapore Bureau.

The Far East Commission has considered the report and the recommendations of the Conference which was held in Singapore from February 4th-13th, 1925, to frame proposals regarding the working of the Bureau of the Epidemiological Intelligence Service which was inaugurated in Singapore on March 1st.

The presence at the Conference of representatives of twelve Eastern administrations, the statements made by certain of the delegates at the Conference regarding the financial support of the Bureau, and the generous offers received from the Governments of French Indo-China andthe Dutch East Indies to transmit the Bureau's intelligence by wireless free of charge, all evidence the great interest taken by the countries directly interested in this extension of our Epidemiological Intelligence Service.

Dr. Tsurumi informed the Commission that the Japanese Government approved all the resolutions adopted by the Singapore Conference.

Special attention was paid by the Far East Commission to the proposal to establish an Advisory Council for the Bureau and to the budget propositions emanating from the Singapore Conference. The resolution adopted by the Singapore Conference in regard to the Advisory Council is framed as follows :

> "That some form of Advisory Council would be of great value to the development of the activities of the Bureau. Its constitution would naturally be international and it is recommended that it function as a special commission of the League of Nations Health Committee, to which it would report. It would take note in an advisory capacity of any or all of the activities of the Bureau. It should meet once a year and urgent questions arising in the intervals between sessions should be dealt with by correspondence. "

The Far East Commission (with the exception of Professor Ricardo Jorge, who reserved his vote) recommends the adoption of this resolution in the form in which it has been presented and proposes that all countries which were invited to send a delegate to the Singapore Conference should be asked to nominate a member of this Advisory Council, to which should be added a representative or representatives of the Health Committee of the League of Nations one of whom would be the Chairman.

It is assumed that the travelling and other expenses incurred by members attending the Advisory Committee's annual meeting would be borne by the administration represented.

The Far East Commission recommends the approval of the budget proposals for 1925 and considers that expenditure on this scale should be sanctioned for twelve months or until the

Advisory Committee referred to above can hold its first session and make further proposals in the light of work done and experience gained. The Advisory Committee might be asked to frame definite suggestions at that meeting as to how the excess expenditure over and above the average income for the first five years might be met.

The Far East Commission recommends the approval of the remaining resolutions of the Singapore Conference as they stand. Dr. Norman White explained that it was understood that the endeavour to obtain regular information regarding epidemic prevalence in Africa, etc., referred to in Resolutions 10 and 11, would be made by the Secretariat in Geneva and thence supplied to the Bureau. It is recommend that that procedure be adopted.

The Far East Commission considers that the term "Eastern arena" as used in the Singapore Conference's report is inappropriate to express the area in which the Singapore Bureau is interested; "Eastern waters" would be more suitable.

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C. H. 314.

**Annex 54.**

## REPORT BY THE OPIUM SUB-COMMITTEE ON CERTAIN PROVISIONS OF THE 1925 INTERNATIONAL OPIUM CONVENTION.

*Adopted by the Committee on April 23rd, 1925.*

Article 4 of the International Opium Convention concluded at Geneva in February 1925 prescribes:

"The provisions of the present Chapter apply to the following substances:

. . . . . .

"(*g*) Any other narcotic drug to which the present Convention may be applied in accordance with Article 10."

Article 10 again stipulates that:

"In the event of the Health Committee of the League of Nations, after having submitted the question for advice and report to the Permanent Committee of the Office international d'hygiène publique in Paris, finding that any narcotic drug to which the present Convention does not apply is liable to similar abuse and productive of similar ill-effects as the substances to which this Chapter of the Convention applies, the Health Committee shall inform the Council of the League accordingly and recommend that the provisions of the present Convention shall be applied to such drug.

"The Council of the League shall communicate the said recommendation to the Contracting Parties. Any Contracting Party which is prepared to accept the recommendation shall notify the Secretary-General of the League, who will inform the other Contracting Parties.

"The provisions of the present Convention shall thereupon apply to the substance in question as between the Contracting Parties who have accepted the recommendation referred to above."

The Opium Commission of the Health Committee has been asked to consider these provisions and to ascertain by what methods the procedure defined in Article 10 might be applied. This procedure, we may say in passing, was selected in order to prevent any possibility of the principle expressed in paragraph (*g*) of Article 4 being applied or interpreted in an arbitrary manner, and in order to afford the best possible guarantees that the Convention would not, in any circumstances, be applied to products other than those which are genuinely liable to give rise to the drug habit. It was considered that these guarantees would best be afforded by a body such as the Committee of the Office international d'hygiène publique, on which most civilised States are represented, while there was no risk that it would be misled by erroneous suggestions. This is, we may add, a happy example of the co-operation between the Paris Office and the Geneva Committee which, it is to be hoped, will be steadily developed.

At a meeting on April 20th, the Commission heard a report on this subject by its expert, Professor Knaffl-Lenz, who drew attention to two products, eukodal and dicodide. Both these products are derivatives of morphine and both have already been proved to have pernicious effects. They are, indeed, two dangerous substances and are likely to become substitutes for morphine, once the latter drug has been made inaccessible to drug addicts. Like morphine, they are liable to give rise to the drug habit. After a short discussion, the Commission decided to request the Committee of the Office international d'hygiène publique to consider the question and to inform the Committee whether it thought that eukodal and dicodide were subject to the terms of the Convention.

The 1925 Convention contains another article which raises the same question of procedure as Article 4. We refer to Article 8, which reads as follows:

> "In the event of the Health Committee of the League of Nations, after having submitted the question for advice and report to the Permanent Committee of the Office international d'hygiène publique in Paris, finding that any preparation containing any of the narcotic drugs referred to in the present Chapter cannot give rise to the drug habit on account of the medicaments with which the said drugs are compounded and which in practice preclude the recovery of the said drugs, the Health Committee shall communicate this finding to the Council of the League of Nations. The Council will communicate the finding to the Contracting Parties, and thereupon the provisions of the present Convention will not be applicable to the preparation concerned."

Whereas the object of Article 4, combined with Article 10, is to permit of an extension of the Convention, Article 8, on the other hand, provides for a certain restriction. This restriction was accepted by the Opium Conference in order to facilitate to some extent the carrying on of the pharmaceutical trade by withdrawing from the effects of the Convention certain pharmaceutical specialities which, indeed, contain certain narcotics, but in such a form and so combined with other substances that they cannot give rise to misuse, viz., the drug habit, while the narcotics which they contain cannot be recovered for use as such.

In order to prevent any possibility of abuse, the Conference has in this case, as we have already said, adopted a procedure identical with that adopted for Article 10. The list of products which are to benefit under the terms of this article is to be drawn up in accordance with the recommendations of the Committee of the Office international d'hygiène publique. The Commission, at the outset, was doubtful of the possibility of drawing up such a list and considered whether it would not be more practical to define the products to which Article 8 cannot be applied. This is the procedure favoured by Professor Knaffl-Lenz, who submitted a very interesting memorandum on this question also. The Commission, however, was obliged to recognise that the Healt Committee was not required for the moment to act as a technical organ, but that its task was restricted to communicating with the Committee of the Office international d'hygiène publique. It was accordingly decided to ask the Health Committee of the League of Nations to request the several States to supply it with a list of the products which should, in their opinion, benefit by the provisions of Article 8. As soon as it is in possession of this information, the Committee will draw up a general list which it will submit to the Committee of the Office international d'hygiène publique, accompanied by any suggestions and observations which it may think necessary.

In the course of the discussion, the question was raised whether it was for the Health Committe to take the initiative in regard to the two points dealt with in this report or whether this should be left to the Committee of the Paris Office. It was, however, recognised that no doubt could subsist in regard to this matter in view of the wording of the two articles of the Convention. It is assuredly for the Health Committee to ask the Committee of the Office for its opinion. Needless to say, however, the latter will always be free to extend its enquiries to other products than those notified to it by the Health Committee and to forward its observations to the latter. But it seems obvious that the Health Committee's work should not be confined merely to registration, but that it should reserve its right to examine and discuss the recommendations of the Committee of the Paris Office.

Finally, it was decided that Professor Knafff-Lenz's two reports should be attached to the communication forwarded by the Health Committee to the Paris Office.

C.H. 316.

## Note by Professor Knaffl-Lenz.

*Remarks and Proposals relative to Articles* 8 *and* 10 *of the Opium Convention*, 1925.

*Ad Article* 8.

The Mixed Sub-Committee of the Health and Opium Committees pointed out at its session held from September 5th to 7th, 1923 that the provisions of Article 14 of the Hague Convention do not apply to preparations containing less than 0.2 per cent of morphine or 0.1 per cent of cocaine and heroin, and that, accordingly, it is possible to recover the above-mentioned alkaloids from such preparations or to convert them into a form which makes them liable to abuse. This, for instance, would be the case as regards solutions containing morphine which, in addtion to morphine, contained only volatile substances which could be easily removed by evaporation. As only the percentage of alkaloid, and not the quantity of the preparation, is subject to restrictive regulation, it is possible to obtain solutions of any concentration and quantity desired or to recover free morphine.

A 0.2 per cent morphine solution can be brought to the full strength of an official tincture of opium by evaporation to one-fifth of its original volume.

The text of the Convention, moreover, does not make it clear whether the alkaloid content permitted refers to the base or to the salt. In the first case, 11 to 12 ccm. (3 to 4 teaspoonsful, of a liquid pharmaceutical preparation of this nature would correspond to the maximum single dose prescribed in the *Pharmacopæia*, while, in the second case, the quantity would be 15 ccm

As in most countries, doctors' prescriptions containing opium may not be repeated to the same patient unless the doctor makes an explicit note to that effect, the result would be that pharmaceutical preparations containing 0.2 per cent morphine, when prescribed by doctors, could only be obtained on one occasion in the prescribed quantity, whereas patent medicines containing the same amount could be sold in unlimited quantities.

As, from a medical point of view, it seems undesirable to place on the open market medicines containing such powerful drugs in unlimited quantities, the supply of all preparations containing morphine should be made subject to a doctor's prescription, especially since there is no necessity for the free sale of preparations of this nature. The medicines under consideration are used as a sedative or, in the case of diseases of the respiratory organs, for the purpose of relieving the irritation which leads to coughing, or for external use. For the first purpose, modern medicine is provided with a sufficient number of valuable and harmless substitutes, while the use of codeine, which is not liable to abuse and does not lead to addiction, is far more suitable for overcoming the irritation which causes coughing. Opium plasters and ointments are out of date and useless in the present state of medicinal science.

For the above-mentioned reasons, the provision of the Opium Convention under which preparations containing less than 0.2 per cent of morphine and 0.1 per cent of cocaine are not subject to control should not be re-introduced in the new Convention, more especially, seeing that the new Convention contains a provision (Article 9) under which chemists may be authorised to supply to the public at their own discretion for immediate use in urgent cases tincture of opium, laudanum or Dover powder. In this connection, it is well to point out that the authorised maximum quantity, viz., 25 centigrammes of opium, is too high. It is, for instance, higher than the maximum single dose prescribed in the majority of pharmacopœia (Austrian, Belgian, Danish, German, Swiss, Japanese, 15 centigrammes); Italian, Dutch (10 centigrammes); Sweden, 20 centigrammes).

Under this provision, it would also be possible for an individual to procure in large cities even a fatal dose of opium by visiting several pharmacies. In this connection, the only drug which is not liable to abuse is Dover powder, which is mixed with ipecacuanha, and consequently, if consumed in fairly large quantities, would cause vomiting.

Accordingly, it would be well if the above-mentioned authorisation could be limited to Dover powder or, alternatively, that the authorised quantity should be reduced to 10 centigrammes.

Cocaine for therapeutical purposes is only used on account of its anæsthetic and vaso-constrictor properties, which are still to-day indispensable in laryngology and ophthalmology In all other cases, it can be replaced by harmless substitutes. As cocaine has no other therapeutical value, it is superfluous, or rather dangerous, to allow preparations containing cocaine, even in so small a quantity as 0.1 per cent, to be placed upon the market. Otherwise, wines or other alcoholic beverages containing cocaine could — as is at present the case in many countries — be sold freely, the only result being to lead to the further spread of the cocaine habit.

*Article* 10.

Article 14 of the Hague Convention prescribes that the laws and regulations of the Convention shall apply to all derivatives of morphine and the other opium alkaloids which may be shown by the generally recognised results of scientific research to be liable to abuse and productive of ill effects.

Only two of the new derivatives of morphine are liable to cause pathological symptoms similar to those of morphinism or to give rise to abuse, viz., *eukodal* and *dicodide*.

*Eukodal* (Dihydrooxycodeinonhydrochlorate). — This derivative of codeinone, which in its action and chemical composition closely resembles morphine, was described in 1917 by Freund and Speyer, has been frequently employed since then, and has already resulted in a number of cases of eukodalism, which is not substantially different from morphinism.

Its chemical affinities with morphine and codeine are as follows: Whereas codeinone is produced by the oxidation of methoxymorphine (codeine), we obtain by the oxidation of dimethoxymorphine (thebaine, an alkaloid found in small quantities in opium, with an action similar to that of strychinine) oxycodeinone, which is converted by the addition of two hydrogen atoms into dihydroxycodeinone, the hydrochloric salt of which is eukodal. The base has the formula $C_{18}H_{21}NO_4$ and melts at a temperature of from 220 to 222° C.

The action of eukodal is in the main identical with that of morphine. Like all derivatives of morphine which produce euphoria, the repeated use of eukodal results in the formation of a habit and a craving for the drug, and, when the patient is deprived of supplies, deprivation symptoms appear.

Shortly after the preparation was first produced, the formation of the eukodal habit was demonstrated by Biberfeld in experiments carried out on animals.

The following are some of the writers who have reported on eukodalism in human beings:

König, *Berl. klin. W.*, 1919, Nr. 14;
Alexander, *Münch. med. W.*, 1920, Nr. 30;
Schröder, *Zeitschr. f. Tubercolose*, vol. 34;
Meyer, *Münch. med. W.*, 1924, Nr. 5.

The last-named quotes six cases of abuse and demands strict legislative measures for preventing such misuse.

Other clinical accounts are given by the following writers:

FREUND and SPEYER, *Münch. med. W.*, 1917, Nr. 12;
FALK, *Münch. med. W.*, 1917, Nr. 12;
BECK, *Münch. med. W.*, 1919, Nr. 16;
BAUMM, *Therap. Monatsch.*, 1919, Nr. 6;
FALK, *Therap. Monatsch.*, 1919, Nr. 5;
FALK, *Berl. klin. W.*, 1919, Nr. 19;
ROTHSCHILD, *Ther. d. Gegenw.*, 1919, Nr. 3;
LEICHTWEISS, *Ther. d. Gegenw.*, 1921, Nr. 2;
HANKE, *Wiener med. W.*, 1921, Nr. 4;
SPENGLER, *Wiener med. W.*, 1923, Nr. 17;
SCHRÖDER, *Zschr. f. Tuberculose*, Vol. 34, Nr. 2;
BIBERFELD, *Bioch. Zschr.*, CXI, page 447 (Experiments on animals).

*Dicodide* (Hydrocodeinone). — Hydrocodeinone, which has been placed upon the market under the name of dicodide, is chemically closely allied to eukodal. It can be produced both from codeine and from morphine (after being methylated) by reduction with an acid solution of palladium, this operation resulting in the addition to it of two atoms of hydrogen. It has the formula $C_{18}H_{21}NO_3$ and melts at a temperature of 193 - 194° C.

As might be expected from its close chemical relationship to morphine and eukodal, its effects are not substantially different from those of these two drugs. It has also this peculiarity in common with them that it produces euphoria, leads to the formation of a habit and, in the case of persons who are disposed thereto, produces after repeated use a condition which is little different from that of chronic morphinism, but is not altogether identical with it, as the symptoms which follow the withdrawal of morphine cannot be removed by supplying dicodide.

While Boehnke, Crohn, Freundlich, Rickmann, Kleinschmidt and Herz explicitly deny that it is a drug of addiction, Hecht, Roller, Kastelhuhn and Langenheinrich, Bernheim and Bing report that its continued use leads to the formation of a habit and to a pronounced craving and they insist upon the necessity for caution. Schwab and Krebs have also observed pronounced euphoric effects. The habit seems to be more slowly and less easily acquired than that of morphine.

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RICKMANN, *Klin. W.*, 1923, Nr. 15;
KLEINSCHMIDT, *Münch. med. W.*, 1923, Nr. 13;
HERZ, *Deutsche med. W.*, 1923, Nr. 14;
HECHT, *Klin. W.*, 1923, Nr. 23;
ROLLER, *Münch. med. W.*, 1924, Nr. 20;
KASTELHUHN and LANGENHEINRICH, *Münch. med. W.*, 1924, Nr. 20;
BERNHEIM, *Ther. d. Gegenw.*, 1924, Nr. 3;
BING, *Deutsche med. W.*, 1924, Nr. 10;
SCHWAB and KREBS, *Münch. med. W.*, 1924;
SCHINDLER, *Münch. med. W.*, 1923, Nr. 15.

The two derivatives of morphine mentioned above are liable, like morphine, to give rise to abuse, and may produce chronic disease. They should accordingly be subjected to the same limitations as morphine, in conformity with the terms of the Convention quoted at the beginning of this article.

The new synthetic pseudococaine, which is known as psikaine, does not appear from the reports to hand to be likely to lead to abuse.

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**Annex 55.**

## WORK OF THE COMMISSION ON PUBLIC HEALTH INSTRUCTION.

*Report by Professor Léon Bernard, adopted by the Health Committee on April 23rd, 1925.*

After long discussions, in the Commission as well as in plenary session of the Health Committee, which enabled us to clear up and remove difficulties of all kinds connected with our undertaking, you approved, during the October session, my report which defined at one and at the

same time the objects of our enquiry and our method of work, so that the Commission and the Secretariat were able to start work at once.

The purpose of this brief report is to inform the Committee of what has been done up to now and of the point at which we have arrived.

In addition to the documentation which the Secretariat already possessed, we have received several new reports drawn up in accordance with your resolutions.

You have approved the Commission's proposal to commence local enquiries regarding public health instruction, either by members of the Health Committee or by persons nominated by it, but you decided that preparations for each study tour should be made by the Secretariat in conjunction with that member of the Committee or of the Office international who would be best qualified to assist in this preparation by supplying the necessary documentation. In conformity with these instructions, a masterly report has been drawn up at the instigation of M. Velghe by Dr. Timbal on public health instruction in Belgium. He has prepared the ground remarkably well for a visit to Belgium by one of us.

Professor Nocht for Germany and Dr. Jitta for the Netherlands have both been good enough to send us extremely important memoranda, which will greatly facilitate the work of those of us who will carry out the enquiries in those countries.

With regard to these reports, it is necessary once more to remove a misunderstanding to which expression has been given; it is to be understood that these reports, which are of a purely preliminary and preparatory nature, are in no respect official documents. They impose no responsibility and are merely intended to serve as guides, for which we are indebted to the kindness of our colleagues. They will be helpful in indicating the lines along which the local investigations should be carried out. Such local enquiries must not be considered as a control exercised by us of official information; such a misrepresentation has been made. These are not official statements; they are private and informative documents; there is no question of control, but simply of supplementing bare facts and giving them the vitality, suggestiveness and fertility never possessed by dry official communications.

Having said this much, I should like to express our lively appreciation of the valued co-operation of Professor Nocht, Dr. Jitta and Dr. Timbal.

Dr. Andrew Balfour, with the collaboration of a member of one of our Interchanges, Dr. Porter, has sent us a comprehensive report, full of useful information, on public health instruction in the United States of America. This will be submitted to Dr. Welsh, who will be able to complete it and make such additions as he may consider necessary. We would point out how greatly this report justifies the method of collaboration suggested in our resolutions; it is an example of the combined work of experts and members of our Interchanges.

We have also received, thanks to our colleague Professor Ottolenghi, some notes by Professors Mantredi and Di Vestea on public health instruction in the Universities of Palermo and Pisa, and I have myself prepared a note on public health instruction in France. All these reports will, I think, assist the local studies in these countries.

To those of us who have been privileged to hear our President, Professor Madsen, and our colleague, Professor Ottolenghi, give their impressions of their respective tours in Norway and Switzerland, it is obvious that nothing can replace such direct studies. These accounts were a demonstration of the necessity for personal observation and personal conversation in enquiries of this kind. This fruitful method enables us at once to understand clearly, particularly in regard to Norway, not only the nature of public health instruction given, but also its effect upon the sanitary condition of the country. The very special manner in which public health instruction is carried out in the University of Oslo, to which instruction all the professors of the medical faculty contribute each in his respective sphere, necessarily inspires medical students with social ideas. Receiving this instruction from all sides, they become careful practitioners of preventive medicine, animated with the desire to collaborate in public health activity.

* * *

As regards work actually accomplished, it would be premature, if not impossible, to draw any conclusions. The only one which forces itself upon us relates to the utility of the work which we are undertaking in furthering the aims of the Health Committee. None of us can doubt that there is a very close relation between progress in public health, on the one hand, and the intensity and penetration of public health instruction, on the other.

More precise conclusions will emerge later from the mass of facts which we shall have collected. These facts will indicate the methods of public health instruction best calculated to contribute to the improvement of public health and enable us to make recommendations.

At the same time, in order to reach our goal, it is necessary to gain the confidence and obtain the assistance of those persons who can help us with their authority and expert knowledge. With this object in view, I think it would be useful to define once again our purpose and our methods. Our purpose: to determine the factors in public health instruction best calculated to perfect human welfare, and not to sit in judgment on the various methods of imparting this instruction in the different universities. Our methods: not to undertake an enquiry as to the intrinsic value of university programmes, still less of those responsible for applying them, but to analyse the results obtained by different types of public health instruction and their effect on medical education and the habits of the public, by carrying out personal local investigations, imbued with a scientific spirit calculated to demonstrate to all teaching staffs and administrations the high import of our mission.

C.H. 312.

**Annex 56.**

# NEED OF INTERNATIONAL REGULATIONS FOR THE SALE OF PATENT MEDICINES.

*Note by Dr. Poulsson, submitted to the Committee on April 24th, 1925.*

During the past few decades, medical science has undergone great changes. Fifty years ago our medicines consisted mainly of vegetable and Galenic preparations, together with a number of inorganic salts and a few alkaloids. Nowadays, synthetic preparations possessing properties which depend upon their chemical constitution are becoming more and more important. This denotes considerable progress and follows naturally upon the development of chemistry and experimental pharmacology. At first these innovations proceeded mainly from the pharmacological laboratories, but to-day the big chemical factories take the lead in this matter, since their material resources are far greater than the limited means at the disposal of university laboratories. In many cases the big factories command the services of distinguished men of science and possess admirably managed medical laboratories for experimental purposes. This is a natural development and reflects great credit on the industry, which has thus been able to put at the disposal of the medical practitioner a whole number of medicaments of the greatest value.

At the same time, this progress is attended by certain disadvantages. Side by side with the large factories which are doing valuable work are to be found a number of unscrupulous and doubtful firms and manufacturers who think that disease provides excellent opportunities for material gain and who often reap where others have sown. This happens in various ways, and I should like to give a few examples.

A slight chemical change is made in some useful and well-known medicine, and the product thus obtained is advertised as if it were some newly discovered and much more potent remedy.

Then, again, some vegetable extract hard to detect is added to a well-known medicament and the product thus obtained is put upon the market under a new name or, more often still, in the form of tablets, and at a far higher price, as was the case, for example, with the *phenolthalein* sold under the name of " Purgen ".

A trick which always succeeds consists in attributing to a product a whole series of therapeutic qualities; for example, an antithermic medicine is said also to be a specific remedy for feverish complaints, like influenza, etc.

Most often of all, the method employed is that of fancy names suggesting the therapeutic value of the medicine, such as, for example, " Diabetin " or Antisclerosine. The patient believes that he has no further need of a doctor but that he can cure himself by following the directions supplied with the medicine. Further, the market provides substances like " Nephritin " or " Anasarkin " for kidney and heart affections. Sometimes, the names are selected in such a way as to suggest that the action of the medicine is weak and the substance harmless. Chloral and Indian hemp are very potent medicines. After the addition of a small quantity of bromide, the mixture is sold under the name of "Bromidia", with the idea of inspiring more confidence. The most profitable medicines are those whose names indicate that they are endowed with the power of healing neurasthenic or sexual disturbances, like those medicines which are supposed to restore menstruation or to cure impotence. In the case of such preparations as anti-morphine, which is nothing more than 2 per cent solution of morphine, the appellation ceases to be a fancy name and becomes almost criminal.

The most important factor in the success of this kind of preparation is the publicity obtained through the daily newspapers and medical journals. Most dangerous of all is, of course, their advertisement in the daily papers, for there it is even possible to recommend secret remedies. Although the use of these remedies has diminished during the last few years, two million pounds sterling were, according to Clark's investigations, spent in England in 1913 on advertising secret remedies. The same writer tells us that the captital invested in North America in the manufacture of secret cures exceeds that employed in the manufacture of officinal preparations. It is true that the medical journals exercise a certain censorship over this kind of remedy, but it is far from adequate.

I do not intend to enumerate the whole list of disadvantages that might be urged, for most of them are generally known and have been referred to in detail by Torrald Sollman in a remarkable pamphlet published in 1918.

The consequences of the increased manufacture of worthless remedies are known to all specialists. For every good medicine prepared as a result of honest *bona fide* research, there appears on the market a number of preparations of smaller value or of no value whatever. The pharmaceutical industry of the present day may be compared to a field filled with weeds or to an organism afflicted with a parasite.

Accordingly, drastic measures must be taken, and it is clear that the responsibility for these measures should rest with the medical profession as a whole, whether specialists or general practitioners. Indeed, work has already been begun in this direction. This is true, to my own knowledge,

in the United States, where for a long time past useful work has been done by the Council on Pharmacy and Chemistry of the American Medical Association, which includes representatives of chemistry, pharmacology, hygiene, bacteriology and serology, as well as a large number of clinical physicians. The policy and the guiding principles of this Committee are explained at length in the well-known publication " New and Non-Official Remedies ".

In Germany, a great deal of work is being done by the " Deutsche gemeinsame Arzneimittelkommission ". Quite recently, arrangements have been made for a new institute for the examination of medicines. A committee has been appointed to draw up a plan of practical work, and it includes representatives of the medical Press.

In the Netherlands " Het Rijksinstitut voor Pharmaco-Therapeutisch Onderzoek " was created in 1920 and includes a large number of the best specialists and clinical physicians.

In England, Clark, of the University of London, drew attention in 1923 (*Lancet*, November 17th,) to the urgent need of an effective control of the pharmaceutical industry. His article was specially intended as a warning against the illicit traffic in secret remedies and the fraud practised in connection with these remedies, but he also referred to the great benefits conferred upon medicine by the reputable pharmaceutical industry conducted on scientific lines. As a matter of fact, this industry can only gain by the suppression of unfair competition,

I have mentioned, as far as they are known to me, the efforts made to remove the disadvantages attending the manufacture of pharmaceutical products. The organisations to which I have referred have no doubt already accomplished important work, but each has only been working within its own country. Yet the evil is international in character In the last resort, all mankind suffers from it, and this scourge can only be succcessfully combated by international co-operation. It seems to me that the Health Section of the League of Nations should take the initiative in arranging for such collaboration, and I think a small Sub-Committee might be instructed to consider the principles which should be followed and the lines along which the practical work should be carried out.

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C.H. 321.

**Annex 57.**

## WORK OF THE CANCER COMMISSION.

*Report by Sir George Buchanan, adopted by the Committee on April 24th, 1925.*

The Cancer Commission has held two meetings and has had the advantage of examining two reports drawn up by the Sub-Committee of Statisticians on the present position of the enquiry as regards both:

(*a*) The analysis of the official vital statistics of England and Wales, Italy and the Netherlands;

(*b*) Progress reports upon the investigations of the clinical material in the participating countries.

A perusal of these reports has satisfied the Commission that the analysis of the official vital statistics has been carried to an advanced stage in all three countries, and that material has now been assembled permitting a far more detailed comparison than has been previously possible of the incidence of mortality from cancer of the breast and cancer of the uterus, having regard to locality, civil state, age and natality.

The clinical investigations have likewise been carried so far in the countries concerned that a final report upon the points of resemblance and difference in respect of several important conditions and circumstances can be prepared in the near future.

Among other important points established may be mentioned the fact that in each of the three countries the proportion of cases operated upon at a stage giving reasonable hope of a successful result is lamentably small, and that, on the other hand, the lower rate of mortality in the Netherlands and in Italy, in comparison with England and Wales, cannot be attributed to a higher operation rate in the two former countries. The clinical evidence points to a greater malignancy of the disease when developed in England as compared with the Netherlands.

It is on such points as these that the Commission is arranging to present to the Health Committee a summary of the evidence and its considered judgment of the results at the earliest practicable moment.

In this connection, the Committee draws attention to the fact that its enquiries have entailed the collection of valuable data, statistical and clinical, which have never before been obtained or analysed, and which, in the interests of cancer research in all countries ought to be made available in published form.

The Committee considers that one of the principal ways in which it can fulfil its duties at the present time is by the careful compilation of these data and their inclusion in the report under preparation.

C.H. 278.

Annex 58.

# DRAFT INTERNATIONAL AGREEMENT BETWEEN BELGIUM AND THE NETHERLANDS

*Submitted to the Committee on April 24th, 1925.*

The Governments of BELGIUM and the NETHERLANDS, in conformity with Article 41 of the International Sanitary Convention of Paris, 1912, and in order to make the health measures prescribed by the Convention more efficacious and less burdensome, have agreed upon the following articles:

*Article* 1. — Independently of the notifications provided for in Chapter I of the International Sanitary Convention of Paris, 1912, the Health Administration of either country shall immediately notify to that of the other, by telegram, the first recognised case, whether imported or not, of plague, cholera, relapsing fever, typhus fever or smallpox found in its territory.

*Article* 2. — The communications provided for in Article 4 of the Convention of Paris, 1912, in regard to the course of the epidemic and the preventive measures taken, shall also apply to relapsing fever, typhus fever and smallpox.

*Article* 3. — The Health Administrations of the two countries shall regularly send to each other all their publications on the state of public health and particularly on the progress of infectious diseases.

*Article* 4. — The Health Administrations of the two countries shall notify each other of the measures prescribed with regard to arrivals from any infected local area forming part of the territory of a Power other than the High Contracting Parties.

It shall also notify the withdrawal of such measures or any modifications that may be made therein.

*Article* 5. — Each of the High Contracting Parties shall inform the other party as to the port or ports in its territory possessing sufficient equipment to ensure the proper application of the measures referred to in Article 6; it shall clearly indicate, in respect of each of such ports, the composition and technical qualifications of the staff and the nature of the appliances and processes used, and shall give all technical details showing the effectiveness of the health measures carried out.

A list of the ports recognised by the High Contracting Parties as properly equipped shall be drawn up by agreement between the health authorities of the High Contracting Parties. This list may be added to by subsequent agreement.

When such an agreement has been concluded, the present Convention shall become applicable to the ports to which it relates, as soon as the publication provided for in Article 13 has taken place.

*Article* 6. — The Health Administration of the ports of each of the signatory countries shall not impose measures of deratisation, disinfection or other health measures on any vessel, whatever its nationality, during the same voyage if it has previously touched at one of the ports of the other country referred to in the second and third paragraphs of Article 5 and has been subjected to the same measures in that port, provided always that no fresh incident affecting public health has taken place during the passage from one port to the other.

In order to enable the health service of the port of arrival to estimate the value, extent and effectiveness of the health measures already taken, the health service of the port of departure or of call shall issue a certificate in one of the forms agreed upon by the Health Administrations of the two countries.

*Article* 7. — The competent health authorities of the High Contracting Parties shall see that the application of public health measures involves as little hindrance as possible to the service of regular shipping lines.

In conformity with Articles 24, 29 and 34 of the International Sanitary Convention of Paris, 1912, all healthy ships having on board a doctor commissioned [1] by one of the Contracting Parties shall be exempt from medical inspection and other health measures, provided that the doctor declares upon oath that there has been no case of plague, cholera, smallpox, typhus fever or relapsing fever on board since sailing, that no unusual mortality among rats has been observed, and that the health measures prescribed by him during the voyage have been successfully carried out under his immediate supervision.

*Article* 8. — Coasting vessels plying between the ports of the two Contracting Parties shall be exempt from the obligation of producing a bill of health.

In the event of one of the countries becoming infected with plague or cholera, this exemption shall be suspended during the whole period of infection [2].

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[1] By a commissioned doctor is meant a doctor of any nationality who is appointed or approved by one of the Health Administrations after it has satisfied itself that he possesses the qualifications, capability and good character required of an officer of health, and that, in the absence of proof to the contrary, his reports may be regarded by the Government Health Services as valid and correct.

[2] Articles 7 and 9 of the Paris Convention define the terms "infected" and "cessation of infection".

*Article* 9. — Each Health Administration may, if it deems necessary:

(*a*) Take any measures not applied in a port of the other party at which the ship has previously called, and

(*b*) Complete such measures if they have not been applied throughout the ship.

*Article* 10. — The Health Administration, notwithstanding the provisions of Article 6, reserves the right in exceptional cases:

(*a*) To repeat measures which it considers to have been carried out in an inadequate manner;

(*b*) To decide, in connection with the application of Article 7, second paragraph, whether the operations carried out *en route* provide sufficient guarantees, and, if they do not, to require their partial or complete repetition. If necessary, it may have a doctor's licence suspended or revoked.

In the cases provided for under (*a*) and (*b*), it must immediately notify the Health Administration of the other Contracting Party and inform it of the facts which have determined the decision.

*Article* 11. — The Health Administrations shall facilitate, as far as possible, the interchange of individual or collective visits by their respective health officials, with a view to satisfying themselves on the spot of the efficiency of the health services in ports.

Such officials shall in all cases bear an authority issued by the Government Health Department to which they belong, and they shall show this authority to the public health officials of the other Contracting Party.

*Article* 12. — Each Government Health Department shall send to the other before April 1st every year a report on the application of the present agreement in its own ports during the previous year.

*Article* 13. — The present Convention may be denounced by either of the Contracting Parties at the end of any year, notice of denunciation being given three months in advance.

The present Convention, the list drawn up in accordance with Article 5, and also any changes in this list, as and when they occur, shall be published in the " Official Journal " of each of the Contracting States.

The notice of denunciation provided for by the present article shall be published by both Contracting Parties.

*Article* 14. — The present agreement is without prejudice to the special measures regarding emigrants, which the Contracting Parties reserve the right to apply in virtue of Article 49 of the Sanitary Convention of Paris, 1912.

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C.H 305

**Annex 59.**

## DRAFT SANITARY CONVENTION FOR THE FAR EAST.

*Letter from the Director of the Japanese Bureau accredited to the League of Nations to the Secretary-General of the League.*

Paris, April 15th, 1925.

[*Translation.*]

Referring to your letter of March 26th, 1924, relating to the report of the Medical Mission to the Far East, I have the honour to inform you, under the instruction of the Minister of Foreign Affairs at Tokio, that the Japanese Government agrees, in principle, to the opinion expressed by Dr. Norman White, that there is an urgent need of a special chapter applicable to the Far Eastern area in the forthcoming revision of the Paris Convention, or a special Sanitary Convention which will adequately meet the present sanitary condition in the Far East. The Japanese Government came to this conclusion after a careful consideration of the sanitary situation in the Far East, with particular reference to the proposed draft of the revision of the International Sanitary Convention of 1912, which, in the opinion of the Japanese sanitary authorities, is inadequate to cope with the epidemic situation in the Orient.

As to the details of the technical questions involved in the draft Convention proposed by Dr. Norman White, the Japanese member of the Health Committee will present the views of the Government in the coming session of the Health Committee. (See Appendix.)

*(Signed)* M. MATSUDA,
*Director of the Japanese Bureau accredited to the League of Nations.*

C.H. 315.

## Appendix.

### The Opinion of the Japanese Government on the Draft Convention proposed by Dr. Norman White.

*Memorandum by Dr. Tsurumi.*

[*Translation.*]

In the opinion of the Japanese Government, any universal sanitary convention or agreement in which Japan can effectively participate must take account of existing sanitary conditions in the Far East. In making this categorical declaration, the sanitary authorities of the Japanese Government have no intention of obstructing in any way international co-operative effort in discussing and concluding an international sanitary convention. On the contrary, they are most desirous of co-operating in the fullest possible manner with other Powers in taking any progressive measures for the sanitary safeguard of the world.

Again, our authorities are mindful of the complicated problems involved in a sanitary convention of an international character. Not only have public health questions to be examined, but there are political, administrative and economic considerations which are of paramount importance. In these respects, our interests are somewhat analogous with those of Great Britain, with her vast maritime interest which encircles the entire world.

Japan is so situated that constant vigilance is necessary to safeguard the health of her people along her extended coast lines, which face Siberia in the north and China in the south. The number of vessels which call at our shores is over a thousand each month, and a large proportion of these touch, during their voyage, some port at which one or other serious communicable disease exists. Unfortunately, such ports are often not far distant from our shores. The history of cholera and plague in Japan has shown that, in spite of energetic measures, Japan has often been invaded by severe epidemics.

For these reasons, our sanitary authorities are of opinion that, in concluding a sanitary convention the following broad principles, among others, should be observed:

1. Quarantine procedure should be based on the sanitary condition of ports, taking also into account their sanitary organisation and equipment. All large ports should be equipped with fumigation apparatus for ships and a bacteriological laboratory where rodents can be constantly examined, etc. At the time of epidemics, strict measures should be taken at the port of departure. If such measures be taken in a recognised port, this fact should carry due weight with the port authorities in other countries, so as to facilitate the circulation of vessels.

2. It should be left to the discretion of the Government of the port of arrival, acting on all the information at its disposal, to decide whether a port is infected or healthy.

3. In this connection, it may be stated that, in the experience of the Japanese authorities, no effective guarantee exists if measures be confined to so-called infected ships as ordinarily defined. In this particular respect, the Japanese sanitary authorities have had very bitter experience in the past.

4. It should be left to the discretion of individual countries to submit to bacteriological examination the passengers and crews of ships which come from a port infected by cholera; if they consider this necessary, and if bacillus carriers be discovered, appropriate measures should be taken against the ship.

5. When the ship arrives from a port the sanitary condition of which is not known, it should be left to the sanitary authorities at the port of arrival to decide what measures should be taken against the ship.

6. Our sanitary authorities, in view of the geographical position of their country, are willing to send information regarding the prevalence of epidemic diseases in Japan to the League's Bureau at Singapore.

When we examine the draft convention which has been suggested by Dr. Norman White, we find that some of these basic principles are embodied therein. The sanitary authorities of the Japanese Government think however, that the provisions by which a port is to be considered automatically infected by the occurrence during a certain definite period of time of a certain definite number of cases of the communicable diseases referred to in the draft convention and whereby a port is to cease to be considered as infected on similar considerations will be difficult to apply in practice.

In these provisions there are other technical difficulties.

Other points of detail, such as the determination of the goods or merchandise mentioned in Articles 12 and 13, etc., must be left for later consideration.

C.H. 287.

**Annex 59a.**

## DRAFT SANITARY CONVENTION FOR THE FAR EAST.

*Letter from the Netherlands Government to the Secretary-General of the League.*

[*Translation.*] Berne, March 30th, 1925.

I am instructed by the Minister for Foreign Affairs at The Hague to inform you that the Netherlands Government is prepared to accede to the " Draft Sanitary Convention for the Far East " in the form in which it has been prepared by Dr. Norman White and printed in his report (C.167.M.43.1924).

The Netherlands Government, however, desires to submit for consideration a few technical amendments which are given in the annexed note.

*(Signed)* W. Doude van Troostwijk.

### Draft Sanitary Convention for the Far East.

*Article 7.* — As regards the cases mentioned under (*b*) and (*c*), it would appear to be necessary to indicate the precise moment at which the period of two weeks referred to in (*b*) and the period of two months referred to in (*c*) begin to run.

*Article 15.* — The words " having persons under observation on board " should be inserted in the first sentence after the word " ship ".

*Article 16.* — In the first condition mentioned under (*c*), the word " fumigated " should be replaced by the word " disinfected ", which has a wider meaning.

*Article 16.* — This article should be drafted so as to make it clear that the prohibition regarding the discharging of cargo may also apply to the disembarkation of passengers and mails.

*Article 17.* — The " bill of health " should, if possible, be issued in the form of a booklet.

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**Annex 60.**

## WORK OF THE TUBERCULOSIS COMMISSION.

*Report by Professor Léon Bernard, adopted by the Committee on April 25th, 1925.*

The Health Committee considers that the results of the preliminary enquiry undertaken by Dr. Biraud into the decline of tuberculosis throughout the world and the causes of this decline justify its continuation and has entrusted it to a permanent Commission.

The Commission met, under the chairmanship of Dr. Tsurumi, with a view to indicating to the Secretariat the general lines to be followed.

In the first place, methods were discussed. The Commission decided that two methods should be adopted: on the one hand, a partial enquiry into the various aspects of the question in that country where it would be likely to give the most fruitful results, both on account of the special conditions obtaining there, and the value of the statistical information available. On the other hand, a small number of countries should be selected — also offering favourable facilities from the statistical point of view — and in all of these the same factors — and as many factors as possible — should be investigated conjointly and along parallel lines, so that conclusions might be reached on the basis of a comparison of the various data collected.

The recommendation has been made that the following categories of countries should be taken into consideration: those in which the death-rate from tuberculosis is declining, those in which it is stationary, and those in which it is increasing. For the purpose of discriminating between these categories, Dr. Rosenfeld's report will be useful.

In the second place, the Commission discussed the aspects of the problem to be studied in the partial or comprehensive enquiries. It was guided by the present position of its work, and the practical objectives to be aimed at. Not only must the respective importance of the different social factors in the question of tuberculosis be determined theoretically, but also the true efficacy of the measures directed against the spread of that disease. From this point of view, it must be ascertained whether, in a country where the mortality from tuberculosis is diminishing, this decline is due to direct measures against tuberculosis (dispensaries, special beds in sanatoria and hospitals, prophylactic institutions for children, educational propaganda) or whether it is only

the result of variations in the character of the disease itself, *e.g.*, in the virulence of the bacilli or in the progressive immunisation of different groups of human beings; or whether, again, it is due to measures affecting the social aspects of tuberculosis, such as housing, improvement of general sanitary conditions in the town, diet, etc.

The Commission decided that no feature of the problem should be neglected *a priori*, and that, therefore, it was necessary to take into consideration the studies in connection with the etiology of the disease which may prove useful for the purpose. Certain statistical data, moreover, may help to throw light on the immunisation of groups of persons. Under cover of this reservation, however, the enquiry must not take the form of a laboratory research into the etiology of the disease.

The Commission must, however, neglect none of the social factors. It therefore adopted the conclusions of Dr. Biraud's report, and decided to enquire into: (1) the comparative ratio of mortality from tuberculosis to general mortality; (2) the influence of diet; (3) the relation between milk consumption and tuberculosis in children; (4) the influence of industrial work; (5) the part played by direct anti-tuberculosis measures as defined above.

To this programme the Commission made the following additions: (1) the part played by conditions of life and labour in agricultural and commercial occupations; (2) the part played by general sanitary improvements in the towns, with special reference to the improvement of housing conditions; (3) the relation between tuberculosis and alcoholism.

Finally, the Commission was of opinion that there was no need to make a distinction between these various questions either as regards their comparative importance or the order in which they should be studied. On this point, the greatest liberty of action should be allowed to the persons charged with the enquiries and also with regard to the selection of data and criteria which would allow an exact estimate to be formed of the importance of the factors under consideration.

The Commission is aware of the elusive character of some of these factors and of the complexity of the whole problem, but its importance from a scientific, social and sanitary point of view is so great that the Health Organisation of the League cannot refuse the work which it has quite naturally been asked to do and which, owing to the facilities at its disposal, it alone is able to undertake and bring to a successful conclusion.

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C. H. 325.

**Annex 61.**

## ESTABLISHMENT OF BUREAUX TO FACILITATE CO-OPERATION BETWEEN NATIONAL HEALTH ADMINISTRATIONS AND THE HEALTH ORGANISATION.

*Letter from M. Benes to the Secretary-General of the League of Nations.*

[*Translation.*] Prague, April 6th, 1925.

The Ministry for Foreign Affairs of the Czechoslovak Republic has the honour to inform you that the Ministry of Public Health, wishing to develop and extend its co-operation with the Health Organisation of the League of Nations, has created within the Ministry a special bureau for liaison work with the League of Nations in all questions connected with public health.

The Ministry for Public Health has placed Dr. Jaroslav Hrdlička, Ministerial Counsellor, in charge of this work, and has appointed Dr. Bohuslav Pour, Assistant Secretary at the Ministry, and Dr. Charles Urbánek, Government Medical Officer, to assist him. The Minister of Public Health would be glad if Dr. Evald Tomanek, as member of the Health Section of the Secretariat, could co-operate as far as possible in the work of this bureau, on the understanding that he receives the requisite authorisation from the Health Organisation of the Secretariat.

The duties of this bureau will be to centralise and co-ordinate all the activities of the Ministry in connection with the League of Nations; to undertake all enquiries and all work occasioned by the necessity of supplying the League with current information and details relating to special questions; to keep in touch with all the League's regular activities and to submit proposals providing a basis for future co-operation; and, lastly, to make proposals on its own initiative.

*(Signed)* Dr. E. Benes.

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C. 248. 1925. III.
(C. H. 324.)

**Annex 62.**

# REPORT TO THE COUNCIL ON THE WORK OF THE FOURTH SESSION OF THE HEALTH COMMITTEE, HELD AT GENEVA FROM APRIL 20TH TO 25TH, 1925.

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## I.

The Health Committee adopts the programme of Interchanges of Public Health Officers for the year 1926 suggested by the Medical Director.

According to this programme, Collective Interchanges will be held in Great Britain, Germany and Denmark. To continue the collaboration established this year with the Latin-American countries, six public health officers from the Republics of Central and Southern America will be selected for participation in these European collective Interchanges.

Furthermore, a collective study tour will be organised in Africa in accordance with the recommendations of the Congress of Tropical Medicine held at Loanda in 1923. Twenty members of the Colonial Health Services of Belgium, France, Great Britain, Portugal, Spain and the Union of South Africa will participate.

An Interchange of Specialists in Child Welfare will be organised, as well as a Port Health Officers' Conference, in which port health officers of the Mediterranean and Black Sea will participate.

Individual fellowships will be organised in accordance with the credits available.

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## II.

The Health Committee, taking into consideration the repeated requests that have been made for an Interchange of Sanitary Engineers, and desiring no longer to delay the organisation of such an Interchange:

1. Decides that an Interchange of Sanitary Engineers shall take place in 1926;
2. Requests the Medical Director to undertake immediately a study of the conditions under which this Interchange should take place and the means of bringing it about.

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## III.

The Health Committee decides to entrust the task of representing the Health Organisation of the League of Nations at the forthcoming Conference on Sleeping-Sickness in London to the President of the Health Committee and the Medical Director of the Health Section.

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## IV.

The Health Committee adopts all the resolutions on the work of the Malaria Commission contained in the report of its Chairman.

These resolutions deal:

(1) With the nomination of the following corresponding members of the Commission:

Professor BRUMPT (for France),
Colonel CHRISTOPHERS (for British India),
Dr. DARLING (for the United States of America),

and of Dr BASSO, of Smyrna, as a medical correspondent for the Near East.

(2) With the plans for study tours in 1925, which include a collective study of the malaria situation in Palestine, Syria and Sicily, and a similar tour in Spain.

(3) With the approval given to the report of the Commission which visited last year certain parts of Bulgaria, Greece, Italy, Roumania, Russia and the Kingdom of the Serbs, Croats and Slovenes.

(4) With the researches on the secondary alkaloids of cinchona. These researches concern the therapeutic use of cinchona and of the total extract of the cinchona bark; they will be conducted on a uniform plan in order to obtain directly comparable results in a certain number of hospitals in Algeria, Italy, Roumania, the Kingdom of the Serbs, Croats and Slovenes and Spain.

(5) With the plan of co-ordinating the studies intended for malariologists. The plan consists of courses of study lasting from four to six weeks in the Institutes of Tropical Medicine or Hygiene in Hamburg, London and Paris. The University of Rome and the various Spanish and Dutch Institutes will assist by facilitating more advanced individual researches. These courses will be followed by practical work of two to three months' duration in regions where the campaign against malaria is being vigorously carried on along various lines (Calabria, Corsica, Dalmatia, Macedonia, Palestine, Sardinia, Spain, etc.).

(6) With the study of the value of major "bonifications" of malarial regions in Italy and the Kingdom of the Netherlands, from the point of view of anti-malarial measures.

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## V.

The Health Committee adopts the report presented by the Far East Commission.

The report is concerned with an examination of the recommendations formulated by the Conference which met at Singapore from February 4th to 13th, under the auspices of the Health Committee. The Conference included representatives of the sanitary administrations of British India, British North Borneo, Ceylon, China, Dutch Indies, the Federated Malay States, French Indo-China, Hong-Kong, Japan, Philippines, Siam and Straits Settlements. The report announces the establishment on March 1st of a Bureau of Epidemiological Intelligence for the Far East, at Singapore, and mentions the generous offers of the Governments of French Indo-China and the Dutch East Indies to transmit by wireless without charge the information collected by this Bureau.

The Health Committee considers that the creation of an advisory committee would be of great value for the development of the Bureau. The advisory committee would serve as a special commission of the Health Committee, and would consist of delegates from all the sanitary administrations which were invited to the Singapore Conference, as well as one or more representatives of the Health Committee of the League of Nations. A representative of the Health Committee would be the chairman of the advisory committee.

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## VI.

The Health Committee approves the budget estimates for 1926 presented by the Budget Commission.

The budget estimates for 1926 reach a total of 995,810 francs as against 809,764 francs for 1925.

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## VII.

The Health Committee notes that Dr. F. Norman White represented the Health Organisation of the League of Nations at the Pan-American Sanitary Congress held at Havana last November. The Health Committee is happy to learn that on this occasion Dr. Norman White and Surgeon-General Cumming, as well as other representatives of the Health Services of the United States and members of the Pan-American Sanitary Bureau, were able to examine detailed programmes of continued collaboration between various American Health Services and the Health Organisation of the League of Nations.

The Health Committee desires its Far Eastern Bureau to keep in touch with Mr. Alexander Hume Ford, Director of the Pan-Pacific Union, in regard to the reunion of a Pan-Pacific Red Cross Conference which will take place in 1928, with a view to eventual participation in the work of the proposed Conference.

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## VIII.

The Health Committee decides that it will be represented at the reunion of the International Council of Nurses in Helsingfors, July 20th to 25th. It regrets that no member of the Health Committee is able to attend the second Conference of Red Cross Societies of Eastern and Central Europe, which will be held at Vienna, May 11th, under the auspices of the League of Red Cross Societies.

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## IX.

The Health Committee adopts the report presented by the Opium Commission.

According to this report, the Committee shall ask the Permanent Committee of the Office international d'hygiène publique, in conformity with the procedure to be found in Article 10 of the Opium Convention of 1925, to give its opinion regarding the desirability of adding to the preparations dealt with by the Convention two new medical preparations derived from morphine and codein — eucodal and dicodide — which would appear to be of a habit-forming nature.

The Health Committee shall, moreover, communicate with Governments, asking them to furnish a list of preparations containing narcotics to which, in their opinion, in conformity with Article 8 of the Convention, the provisions of the Convention should not be applicable, their composition precluding the recovery of the narcotics for consumption as such. Having obtained this information, the Health Committee will communicate it to the Permanent Committee of the Office international d'hygiène publique for advice and report, in conformity with the procedure laid down in Article 8 of the Convention.

Furthermore, the Permanent Committee of the Office international d'hygiène publique shall be asked by the Secretariat-General to make forthwith all necessary arrangements to carry out such investigations as may be necessary, to enable it to give the advice for which it may be asked.

The report presented to the Health Committee by Professor KNAFFL-LENZ on the two points referred to above shall be communicated to the Permanent Committee of the Office international d'hygiène publique.

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## X.

The Health Committee adopts the report of the Commission on Public Health Instruction.

In compliance with former resolutions, the Commission on Public Health Instruction and the Secretariat have engaged in a study of public health instruction for medical students and for specialists.

A certain number of reports have already been received from Belgium, Germany, the Kingdom of the Netherlands, the United States of America and from a number of universities in Italy. Professors MADSEN and OTTOLENGHI have begun their visits, the first to the University of Oslo, the second to some of the Swiss universities.

It has not been possible for the Commission to draw conclusions from the work accomplished so far, except that the usefulness of the task undertaken has already been confirmed by the documents collected. It was therefore decided to continue the researches with the purpose of discovering the most appropriate methods of public health instruction that would contribute to improvement in the public health.

The Commission is impressed by the importance of the fact that, to produce the best results, it is necessary to gain the confidence and obtain the co-operation of all persons capable of lending the aid of their authority and competence. To this end, the Commission adopted the definitions again proposed by Professor LÉON BERNARD of the purpose and methods of the work. The purpose: to determine which of the factors in the teaching of hygiene may be utilised to the best advantage in perfecting human welfare and not to act as judges of the various methods of teaching hygiene in universities. The methods: not to make investigations on the intrinsic value of university programmes, still less of those persons whose duty it is to apply them, but to analyse the different types of instruction in hygiene as well as their consequences on medical education and the habits of the public, carrying out personal studies imbued with a scientific spirit and able to make the teaching staffs and health administrations realise the high importance of their mission.

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## XI.

The Health Committee authorises the continuation of the efforts being made to obtain from the sanitary organisations interested telegraphic reports regarding cases of plague and cholera occurring in the Mediterranean and Black Sea ports.

It further authorises the Medical Director to draw up detailed proposals concerning this matter; this plan will be acted upon when it shall have received the approval of the Bureau of the Health Committee.

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## XII.

The Health Committee decides to request Professor RICARDO JORGE to study and report on certain questions relating to the epidemiology of smallpox which have been brought before the Committee during the present session.

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## XIII.

The Health Committee adopts the report of the Chairman of the Permanent Commission on Standardisation concerning the present status of researches carried on and approves of the work which has been done.

The report is as follows:

As far as diphtheria antitoxin is concerned, the Danish State Institute of Serotherapy, which is acting as the central research laboratory, has continued to test, by comparison with the previously adopted unit, standards of diphtheria antitoxin submitted by various national institutes and laboratories.

Researches for the purpose of establishing a standard unit for anti-tetanus serum have been carried on with satisfactory results. The Danish State Institute of Serotherapy is now engaged in preparing a certain amount of serum which will be used to establish the new standard.

The resolutions adopted by the Dysentery Conference which met in Geneva in September 1924 had to be slightly amended. A new edition was proposed and accepted by all the participants. The Danish State Institute of Serotherapy, to which the preparation of an anti-toxic unit was entrusted, has now a considerable amount of dried anti-dysenteric serum which will serve in the preparation of a new standard.

The Chairman, after having supplied information regarding the researches being carried out with anti-pneumococcic, anti-streptococcic and anti-meningococcic sera, obtains the approval of the Committee to confide to Professor OTTOLENGHI the preliminary study of the question of the standardisation of anti-anthrax serum. Professor OTTOLENGHI expresses his willingness to undertake the task.

The Chairman of the Standards Committee, after having described the state of the comparative investigations of the Bordet-Wassermann reaction and the flocculation tests, obtains the approval of the Committee to convene, probably in the course of next year, a second Laboratory Conference for the study of the serological reactions of syphilis as well as the antigens employed.

A Conference on the Standardisation of Biological Products will be convoked this year to discuss the results of laboratory studies undertaken with a view of unifying the methods of titrating pituitary extract, thyroid substance, digitalis, Insulin, organic arsenical preparations, ergot and others.

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## XIV.

The Health Committee, on the proposal of Professor PITTALUGA, decides to entrust him and Dr. RAYNAUD with the task of making a preliminary study of Mediterranean leishmaniosis. This study, in the course of which the co-operation of all competent authorities may be secured, will be followed by a report submitted to the Health Committee at its next session.

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## XV.

The Health Committee adopts the progress report of the Cancer Committee, which deals with:

(*a*) Analysis of the official vital statistics of England and Wales, the Netherlands and Italy;
(*b*) Studies of clinical material in the three countries mentioned;
(*c*) The proposed collaboration of certain other countries, notably Switzerland and the United States, in the pursuance of the enquiry.

The Health Committee is glad to note from this report that the enquiries of the Cancer Commission have reached a point at which conclusions can now be formulated in regard to a considerable portion of the subjects under investigation and that it is proposed that a summarising report on these subjects shall be issued at an early date.

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## XVI.

The Health Committee has studied with much interest the report which Dr. GILMOUR has presented on the sanitary conditions in Persia. This report is the result of a survey undertaken at the request of the Persian Government addressed to the League of Nations. The Committee is impressed by the difficulty and importance of the health problems of that country, notably with regard to malaria.

The Committee recommends to the Council of the League of Nations that the report be forwarded to the Government of Persia, which will find in it indications of the lines along which sanitary amelioration could profitably be carried out.

It considers that the Government of Persia, in the interest of its country, would be well advised to take steps to institute a modern system of health surveillance on its more exposed frontiers. The development of municipal health organisations should likewise be encouraged, and with this object in view the Health Committee recommends that facilities be given to enable a medical representative of the Municipal Health Service of Teheran to undertake a study tour for a period of five or six months in certain selected Western States where efficient municipal health activity has been developed.

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## XVII.

The Health Committee, having studied the most appropriate method for the preparation and presentation of an annual report which would give a comprehensive account of its activities, decides that this report should relate to the year ending December 31st and should be based on the resolutions adopted by the Health Committee at its sessions held during that year.

Unlike the report which the Medical Director prepares for the Assembly, which will be submitted to the Bureau for approval, the annual report shall be published, distributed, and placed on sale as soon as practicable at the beginning of each year, and its consideration shall be inserted n the agenda of the next following session of the Committee.

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## XVIII.

The Health Committee, having taken cognisance of a memorandum of Professor POULSSON presented by Professor KNAFFL-LENZ in regard to abuses arising from the use of patent medicines, decides to send this memorandum and the observations of Professor KNAFFL-LENZ to the Conference which the Health Committee has decided to convene in September next for the study of biological products.

Further, the Health Committee considers that neither the study of technical measures of control of patent medicines nor that of legal measures will suffice to solve this question involving the vast problem of medicinal charlatanism. This last is complicated by numerous and complex factors, notably the action of the medical profession and the Press as well as the reaction of the public, and holds grave consequences for the public health.

For this reason, the Health Committee, which was previously invited to do so by Professor LÉON BERNARD, decides to commence the study of this problem and charges M. VELGHE and Professor LÉON BERNARD to present a preliminary report on this subject at the next session of the Health Committee.

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## XIX.

The Health Committee, having taken cognisance of a request of the Turkish Government for the recommendation of a competent malariologist for the purpose of organising a campaign against malaria in Turkey, decides to delay any decision until further information has been received from the Turkish authorities.

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## XX.

The Health Committee, having taken note of the proposal put forward by Professor TSURUMI relating to the formation of a Preparatory Committee for the comparison of texts of Conventions which may come before the International Sanitary Conference, decides to forward this proposal to the Permanent Committee of the Office international d'hygiène publique.

The Health Committee invites the Chairman of the Far East Commission to convene, if necessary, a meeting of the Commission in Paris in the coming week, during the session of the Permanent Committee of the Office international.

---

## XXI.

The Health Committee, having taken note of the report on still-births drawn up at its request by a Statistical Committee, decides to call the attention of all Governments to this report through the intermediary of the General Secretariat of the League of Nations, inviting them to forward the observations of their departments interested in the matter. These observations will be examined at a later session of the Health Committee.

---

## XXII.

The Health Committee has examined the Agreement between the Netherlands and Belgium which, in conformity with Article 41 of the 1912 International Sanitary Convention of Paris, has been drafted to render sanitary measures relating to navigation more effective and less burdensome to commerce.

The Committee considers that the conclusion of agreements of this nature may be recommended to other maritime countries.

Moreover, the Health Committee holds that it would be opportune to add to agreements of this nature a clause providing for recourse to an International Health Organisation for conciliation in case of difference arising in the interpretation of articles of such agreements.

---

## XXIII.

The Health Committee decides to continue the study of the decline in tuberculosis mortality and its causes, entrusting this study to a special Commission under the chairmanship of Professor TSURUMI and composed of:

The President of the Committee,
Dr. CUMMING,
Professor LÉON BERNARD,
M. VELGHE,
Professor OTTOLENGHI,
Dr. GREENWOOD.

The Health Committee adopts the conclusions contained in the report of Professor LÉON BERNARD regarding the methods which should be employed.

---

## XXIV.

The Health Committee, having taken note of the recommendations in the report by Dr. HAIGH relating to the enquiry which is being carried out in accordance with the request addressed by the Albanian Government to the League of Nations, adopts the following conclusions:

1. The recommendations of Dr. HAIGH as to the prime necessity of an efficient organisation of the Civil Services, of Public Health and of Provincial and Municipal Hygiene *are essential*, and, although these imply a complex political and administrative task, they should be applied as soon as possible, in order that an effective campaign may be carried out against malaria and all other infectious diseases.

2. A campaign specially directed against malaria can nevertheless be commenced without waiting for the application of such complex reforms, and to this end the advice and suggestions contained in the report of Dr. HAIGH should be taken into consideration. The preliminary legislative measures should be limited to matters strictly essential for the anti-malaria campaign without complicating excessively the legislation of a country whose administrative organisation has yet to be created. Even regulations regarding anti-mosquito measures should not be applied without a preliminary attempt to obtain the co-operation of the inhabitants and professional classes.

3. The programme of a concrete campaign against malaria such as is contemplated in the suggestions contained in the report can serve at the same time as a starting-point and a basis for all the sanitary organisations of the country.

4. The Committee adopts in their entirety as a programme for an anti-malaria campaign in Albania the recommendations contained in Dr. HAIGH's report and such as are presented by the Malaria Commission.

5. The Committee asks the Council of the League of Nations to draw the attention of the Albanian Government to the advisability of taking into consideration the help offered by the League of Red Cross Societies with regard to educational anti-malaria propaganda.

---

## XXV.

The Health Committee adopts the report of the Medical Director on the work accomplished since the Third Session of the Health Committee, including the proposal to publish an annual volume on progress in public health in various countries.

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## XXVI.

The Health Committee, having examined Resolution I-16 relating to matters of public health adopted by the International Emigration Conference held in Rome in May, 1924, decides, in conformity with the suggestion of Resolution No. 16, to collect documentation relative to sanitary regulations concerning emigration and immigration in force in each country and, to this end, to send a questionnaire to all countries interested.

The Health Committee decides to transmit for the examination of the Permanent Committee of the Office international d'hygiène publique the question as to the advisability of inserting in the International Sanitary Convention special articles relating to emigrants.

Moreover, the Committee considers that national census enumerations should take account of the composition of groups of inhabitants of foreign nationality.

---

## XXVII.

The Health Committee desires to express its appreciation to the Governments of Czechoslovakia and Roumania for the renewed demonstration of interest which they take in the work of the Health Organisation of the League of Nations by establishing bureaux to facilitate co-operation between their Health Administrations and the Health Organisation of the League. This action can only result in making this relationship, which the Health Committee values so highly, stronger and more fruitful.

---

## XXVIII.

The Health Committee, having noted with pleasure the intention of the American Public Health Association to communicate to it their draft conclusions concerning the nomenclature of causes of death, decides to insert in the agenda for its October session the examination of the question of the international nomenclature of the causes of death.

---

**Annex 63.**

## ADVISORY COMMITTEE ON TRAFFIC IN WOMEN AND PROTECTION OF CHILDREN.

*Note by Professor Léon Bernard, assessor, representing the Health Committee of the League of Nations, submitted to the Committee on April 25th, 1925.*

Now that the Advisory Committee is about to enter on a new stage of its work, namely, the protection of children, it appears indispensable to lay down the principles which should guide the work, as well as the methods and objects which should be adopted.

Such a profession of faith is especially incumbent on one who has the great honour of representing the Health Committee of the League of Nations on the Advisory Committee, in view of the necessity of clearly defining the respective spheres of action of the two institutions with regard to this subject. There are many points of contact which might well become points of friction, or at least lead to duplication of work.

It has been thought by some that the sphere of the Advisory Committee should be limited to certain questions, those, for example, connected with morality or jurisprudence, with education or legislation. As a matter of fact, all problems concerning the protection of children are interconnected; no one of them can be approached without taking into consideration questions relating to public health and to the upbringing of children, because all measures for the protection of childhood, whether as regards moral or intellectual instruction, or labour, or penal legislation, and still, more, all measures affecting physical development or preservation from illness, must be based on physiological knowledge.

If the protection of children be not inspired by the principles and based on the methods of hygiene — physical health as well as moral health — the protection would be apt to become merely idealistic and unpractical or to lead to the adoption of unscientific methods.

The objection might be made that an organisation such as this, which is about to start its work, has only the social aspect of the protection of children to consider. That is so, but this limitation, which quite properly excludes pediatry or the study of children's diseases, in no way excludes the intervention of hygiene. To-day, the protection of children forms, by universal consent, one of the essential chapters of social hygiene, and social hygiene is, by definition, one of the sociological sciences. Pure sociologists are perhaps inclined to forget this, particularly at this moment, when many doctors, interested as much in public health as in the health of individuals, and as much in preventive as in curative medicine, are endeavouring to break with the traditions of their calling in order to confer the benefits of hygiene on society at large.

It seems to us, therefore, that hygiene should inevitably be one of the chief pre-occupations of the Committee for the Protection of Children. This principle seems to me unassailable, but its mode of application to the work of the Committee has to be laid down. In my opinion, the latter should not go too deeply into the many problems before it, nor try to solve them, but should rather confine itself to stating them clearly, to putting them into their proper order and to establishing their degree of interdependence. Once this has been done — and in this way the existence of a certain number of special questions will be made clear — it will be necessary to entrust the detailed study of these special questions to the organs of the League of Nations best adapted to examine and throw light on them.

To return to the rôle of health, I do not think that the Advisory Committee can enter upon any of the problems connected with the protection of children without taking into consideration the health experts' point of view. The representative of the Health Committee is in a position to supply it with the necessary preliminary information, but in cases where the Advisory Committee is studying a question of practical application which falls within the special domain of health, such question should be referred to the Health Committee. The latter is best qualified to deal with it and to supply the Advisory Committee with the information required.

In accordance with this view, which appears to me to be the only one which will preserve the Advisory Committee from conceptions perhaps insufficiently informed owing to want of hygienic knowledge, and which will also prevent duplication of work, the duties of the representative of the Health Committee should be those of a liaison officer who will do something more than bring to the Advisory Committee the modest assistance of his personal knowledge; he should draw the attention of the Advisory Committee to those questions which should, in his view, be referred to the Health Committee, which will help to the best of its ability the Advisory Committee in its work.

Furthermore, I take the liberty of reminding you that, in giving its approval to the above considerations, the Advisory Committee will only be applying resolutions Nos. 4 and 5 adopted by the Assembly of the League of Nations at its session of September 26th, 1924. This statement of mine, in fact, merely interprets the intentions of these resolutions and suggests how they might be put into practice:

> "4. The Assembly takes note of the fact that the protection of children in certain respects already falls within the scope of the work of existing organisations of the League; for example, protection, from the hygienic point of view, falls within the sphere of the Health Organisation of the League, and the regulation of the conditions of employment of children within that of the International Labour Organisation, and considers that, in carrying out any new duties entrusted to the League, care should be taken to prevent any duplication of work.
>
> "5. The Assembly recommends, in addition, that the Health Organisation of the League should be invited to consider any measures within its competence which it would be desirable and practicable to undertake for the protection of children from the hygienic point of view."

(*Signed*) Léon BERNARD.

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LEAGUE OF NATIONS

# HEALTH ORGANISATION

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# EPIDEMIOLOGICAL INTELLIGENCE

N° 9

## STATISTICS

OF

## Notifiable Diseases

for 29 European countries, 17 African countries, 20 American countries, 16 Asiatic countries and for Australasia

**for the year 1924**

GENEVA, JUNE 1925

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LEAGUE OF NATIONS
HEALTH ORGANISATION

# EPIDEMIOLOGICAL INTELLIGENCE

## STATISTICS OF NOTIFIABLE DISEASES 1924

N° 9. GENEVA, June 1925.

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# INTRODUCTION

The second Annual Report on the Prevalence of Epidemic Diseases, prepared by the Service of Epidemiological Intelligence and Public Health Statistics of the Health Section of the Secretariat of the League of Nations, contains the statistics for 1924 of cases and deaths from all diseases which are notifiable in each of the countries from which we receive reports.

Although the current returns which are published in the *Monthly Epidemiological Reports* are sufficiently complete to indicate the trend of the diseases, they are often not final. Tables are therefore prepared at the end of each year from the current records and sent to the national health services for verification. Some of the figures in the present volume, therefore, have been corrected and differ from those in the monthly reports. Replies furnishing verified data have been received, up to the time of printing, from the following countries:

| | | |
|---|---|---|
| Algeria | Germany | Roumania |
| Australia | Greece | Saar Territory |
| Austria | Hungary | Scotland |
| Belgium | Irish Free State | Kingdom of the Serbs, |
| Bulgaria | Italy | Croats and Slovenes |
| Canada | Korea | Union of South Africa |
| Cuba | Latvia | Shanghai |
| Czechoslovakia | Lithuania | Spain |
| Danzig | Netherlands | Sweden |
| Denmark | Northern Ireland | Switzerland |
| Egypt | Norway | Tunis |
| England and Wales | Palestine | United States |
| Esthonia | Panama Canal Zone | Uruguay |
| Finland | Peru | |
| France | Poland | |

The British Ministry of Health has kindly verified the data for the following British Colonies and Protectorates:

| | | |
|---|---|---|
| Aden | Iraq | Sierra Leone |
| Basutoland | Kedah | Singapore |
| British Guiana | Kenya | Southern Rhodesia |
| Ceylon | Malay States | Straits Settlements |
| Cyprus | Mauritius | Tanganyika |
| Gold Coast | Nigeria | Trinidad and Tobago |
| Grenada | Northern Rhodesia | Uganda |
| Hong-Kong | Nyasaland | Zanzibar |

The primary object of this series of Annual Reports is to collect in a convenient form all statistical material available on the occurrence of epidemic diseases throughout the world, and it may be regarded as a current source of reference containing reliable information for the study of epidemiology and medical geography. A mathematical analysis of the material is outside the scope of these reports; similarly, the rates of incidence for the different countries are not given, as they would lead to comparisons which would be unjustifiable owing to the varying efficiency of notification.

A short summary of the movement of the various epidemic diseases during the year is, however, included for readers wishing to obtain a rapid review of the epidemiological situation. The value of this review has been enhanced by the commentaries kindly furnished by several health services upon the epidemics in their own countries (Belgium, Bulgaria, Czechoslovakia, Danzig, Finland, France, Greece, Hungary, Roumania, Russia, Kingdom of the Serbs, Croats and Slovenes, Sweden and Switzerland).

The publication of the report at an early date has been considered advisable, although verified data have not, as yet, been received from some of the more distant countries. Later additions and corrections which may be forthcoming will be published in the *Monthly Epidemiological Reports.*

Our best thanks are due to all public health services and statistical offices whose continuous and generous help has made it possible to produce not only this report but the whole system of permanent international records of epidemic diseases, which is becoming more and more firmly established.

GENEVA, *April 15th*, 1925.

# NOTES ON THE PREVALENCE OF EPIDEMIC DISEASES IN 1924.

## PLAGUE

More cases of plague occurred in 1924 throughout the world than in any of the previous five years; this was largely due to the high prevalence in Northern India, which remained the chief centre of the disease. Plague cases were more numerous also in Java, Madagascar, Union of South Africa and on the south-western and southern coasts of West Africa. In other plague centres, especially in Egypt, Iraq and on the east coast of Africa, there were fewer cases than in 1923.

The following tables summarise the information received regarding the incidence of plague throughout the world during 1924, and give, when possible, a comparison with the two preceding years.

**Africa.**

| *Country* | 1922 | | 1923 | | 1924 | |
|---|---|---|---|---|---|---|
| | *Cases* | *Deaths* | *Cases* | *Deaths* | *Cases* | *Deaths* |
| *Algeria* | 22 | 7 | 6 | 3 | 7 | 2 |
| Algiers | 1 | 0 | 4 | 3 | 2 | 2 |
| Oran | 21 | 7 | 2 | 0 | 1 | 0 |
| Mostaganem | 0 | 0 | 0 | 0 | 4 | 0 |
| *Angola* | 636 | 42 | 96 | 29 | 66 | 24 |
| Benguela | — | — | — | — | 37 | 14 |
| Loanda | 600 | 36 | 55 | 3 | 8 | 2 |
| Lobito | — | — | — | — | 8 | — |
| Mossamedes | 36 | 6 | — | — | 13 | — |
| *Canary Islands* | — | — | 46 | 27 | 23 | 2 |
| *Cape Verde Islands:* St. Vincent | — | — | 56 | 18 | — | — |
| *Egypt* | 487 | 228 | 1,519 | 725 | 377 | 194 |
| Cairo | 0 | 0 | 2 | 2 | 0 | 0 |
| Alexandria | 71 | 36 | 67 | 33 | 2 | 2 |
| Port Said | 54 | 35 | 51 | 28 | 6 | 4 |
| Suez | 58 | 33 | 47 | 24 | 20 | 13 |
| Ismailia | 1 | 1 | 0 | 0 | 1 | 1 |
| Provinces of Lower Egypt | 63 | 19 | 392 | 119 | 81 | 45 |
| Provinces of Upper Egypt | 240 | 104 | 960 | 519 | 267 | 129 |
| *Gold Coast* | — | — | 0 | 0 | 322 | 273 |
| *Kenya* | epidemic | | 1,090 | — | 477 | — |
| *Madagascar* | 125 | 28 | 698 | 479 | 1,661 | 1,354 |
| Tananarive | 89 | 6 | 690 | 472 | 1,426 | 1,210 |
| Other localities | 9 | 2 | 8 | 7 | 235 | 144 |
| *Morocco* (French) | 34 | — | 134 | 121 | 53 | 3 |
| *Mauritius* | 98 | 75 | 138 | 118 | 161 | 146 |
| *Mauritana:* Port Etienne | — | — | — | — | 11 | 5 |
| *Nigeria* | 0 | 0 | 5 | 2 | 412 | 338 |
| *Nyasaland* | 0 | 0 | 7 | — | 4 | — |
| *Senegal* | 874 | 490 | 1,221 | 846 | 1,831 | 1,071 |
| Dakar | 214 | 105 | 17 | 5 | 0 | 0 |
| Rufisque | 0 | 0 | 294 | 236 | 0 | 0 |
| Thies | 264 | 90 | 349 | 234 | 193 | 92 |
| Baol | 120 | 94 | 11 | 12 | 32 | 19 |
| Cayor | 33 | 25 | 404 | 216 | 1,338 | 795 |
| Sine Saloum | 35 | 35 | 133 | 139 | 116 | 74 |
| Louga | 0 | 0 | 0 | 0 | 155 | 82 |
| Sassiraya | 0 | 0 | 0 | 0 | 4 | 2 |
| *Somaliland* (Italian) | — | — | — | — | 82* | 28* |
| *Tanganyika Territory* | 52 | 40 | 39 | 26 | 42 | 35 |
| *Tunisia* | 8 | 3 | 31 | — | 11 | — |
| Ben Gardane | 0 | 0 | 29 | — | 0 | 0 |
| Tunis | 0 | 0 | 2 | — | 1 | — |
| Djerbe | 0 | 0 | 0 | 0 | 4 | — |
| Zanghouan | 0 | 0 | 0 | 0 | 2 | — |
| *Uganda* | 1,362 | 1,305 | 938 | 914 | 616 | 534 |
| *Union of South Africa* | 10 | 8 | 20 | 12 | 400 | 246 |

* From November 9th, 1923, to February 1924.

Note.—It should be noted that a "—" always signifies that no information is available.

## America.

| Country | 1922 | | 1923 | | 1924 | |
|---|---|---|---|---|---|---|
| | *Cases* | *Deaths* | *Cases* | *Deaths* | *Cases* | *Deaths* |
| *Argentine Republic* | — | — | 8 | 3 | 14 | — |
| Rosario | — | — | — | — | 1 | — |
| Cordoba | — | — | — | — | 6 | — |
| Santos | — | — | — | — | 5 | — |
| Bahia Blanca | — | — | — | — | 2 | — |
| *Bolivia:* | | | | | | |
| La Paz | — | — | 4 | — | 10 | 10 |
| *Brazil* | 54 | 35 | 53 | 34 | 24 | 18 |
| Para | — | 1 | 0 | 0 | 0 | 0 |
| Bahia | 29 | 20 | 14 | 9 | 9 | 7 |
| Pernambuco | 5 | 3 | 16 | 4 | 0 | 0 |
| Vino del Melagro | 0 | 0 | 1 | 0 | 0 | 0 |
| Porto Alegre | 19 | 10 | 22 | 21 | 14 | 11 |
| Rio de Janeiro | 1 | 1 | 0 | 0 | 1 | 0 |
| *Chile:* | | | | | | |
| Antofagasta | — | — | — | — | 16 | 1 |
| *Ecuador* | 290 | 56 | 126 | 42 | 148 | 47 |
| Guayaquil | 56 | 19 | 101 | 32 | 140 | 46 |
| *Hawaii* | 6 | 12 | 1 | 1 | 3 | 2 |
| Honokaa | 0 | 0 | 1 | 1 | 2 | 2 |
| Hamakua | 0 | 0 | 0 | 0 | 1 | 0 |
| *Mexico:* | | | | | | |
| Tampico | 1 | — | 2 | 1 | 0 | 0 |
| *Paraguay:* | | | | | | |
| Asuncion | — | — | 6 | 4 | — | — |
| *Peru* | 801 | 369 | 855 | 393 | 274* | 108* |
| Ancash | — | — | 6 | — | 48 | 11 |
| Arequipa | — | — | 2 | 1 | 5 | 3 |
| Cajamarca | — | — | 138 | 47 | 29 | 17 |
| Callao | — | — | 15 | 9 | 18 | 10 |
| Lambayeque | — | — | 78 | 51 | 11 | — |
| Libertad | — | — | 185 | 90 | 18 | 4 |
| Lima | — | — | 294 | 136 | 126 | 61 |
| Piura | — | — | 152 | 74 | 15 | 1 |
| Tea | — | — | — | — | 3 | 1 |
| Tunin | — | — | — | — | 1 | — |
| *United States:* | | | | | | |
| Los Angeles | — | — | — | — | 40 | 34 |
| *Uruguay* | — | — | 3 | 1 | 0 | 0 |
| *Venezuela* | — | — | 4 | 2 | — | — |

* Data for November and December have not been received.

## Asia.

| | | | | | | |
|---|---|---|---|---|---|---|
| *Ceylon:* | | | | | | |
| Colombo | 136 | 131 | 230 | 213 | 153 | 131 |
| *China:* | | | | | | |
| Canton | 28 | 23 | — | — | — | — |
| Amoy | — | 254 | — | 33 | — | 18 |
| Foochow | 32 | 19 | — | — | — | 25 |
| Nanking | — | — | — | — | — | 31 |
| *Dutch East Indies:* | | | | | | |
| Java and Madura | — | 10,967 | — | 8,675 | — | 13,060 |
| West Java | — | 11 | — | 272 | — | 350 |
| Mid Java | — | 10,818 | — | 7,572 | — | 12,560 |
| East Java | — | 138 | — | 831 | — | 147 |
| Celebes | — | — | — | — | — | 39 |

**Asia** *(continued).*

| Country | 1922 | | 1923 | | 1924 | |
|---|---|---|---|---|---|---|
| | *Cases* | *Deaths* | *Cases* | *Deaths* | *Cases* | *Deaths* |
| *Hong-Kong* | 1,181 | 1,071 | 148 | 136 | 0 | 0 |
| *India, British* | — | 86,847 | — | 239,481 | — | 377,854* |
| Delhi | — | 191 | — | 2,795 | — | 2 435 |
| Bengal | — | 150 | — | 82 | — | 35 |
| Bihar and Orissa | — | 15,066 | — | 28,822 | — | 10,549 |
| United Provinces | — | 23,291 | — | 74,088 | — | 52,909 |
| Punjab | — | 7,780 | — | 49,723 | — | 248,950 |
| N.W. Frontier Province | — | 124 | — | 3,738 | — | 12,105 |
| Central Provinces | — | 6,149 | — | 26,297 | — | 10,736 |
| Madras | — | 9,193 | — | 11,719 | — | 3,633 |
| Bombay | — | 8,379 | — | 32,165 | — | 8,142 |
| Burma | — | 7,282 | — | 7,628 | — | 4,302 |
| Bangalore | — | — | — | 105 | — | 17 |
| Hyderabad | — | — | — | — | — | 11,325 |
| Mysore | — | 8,945 | — | — | — | 1,836 |
| Other Indian States and Agencies | — | 297 | — | 2,424 | — | 10,915 |
| *Indo-China, French* | 1,268 | 1,093 | 1,040 | 844 | 766** | 453** |
| Annam | 170 | 155 | 111 | 78 | 66 | 24 |
| Cochin China | 3 | 1 | 85 | 55 | 35 | 7 |
| Cambodia | 658 | 545 | 798 | 235 | 111 | 70 |
| Tonking and Kwangchow-Wan | 112 | 94 | 91 | 41 | 635 | 334 |
| Laos | 4 | — | 0 | 0 | 0 | 0 |
| *Iraq* | 685 | — | 708 | 413 | 529 | 308 |
| *Japan* | 118 | 89 | 1 | 1 | 7 | 6 |
| *Palestine* | 64 | 19 | 15 | 5 | 2 | 1 |
| *Persia* | 21 | — | 552 | 454 | 352 | 214 |
| Mohammerah City | 21 | — | 71 | 45 | 149 | 108 |
| Abadan | — | — | 481 | 409 | 119 | 85 |
| *Russia, Asiatic:* | | | | | | |
| Siberia: | | | | | | |
| Buriat Mongol Republic | — | — | — | — | 3 | 3 |
| Kirghiz Republic: | | | | | | |
| Bukeiev Government | — | 14 | *a* | *a* | 344*a* | 318*a* |
| Uralsk ,, | — | — | *b* | *b* | 90*b* | 89*b* |
| Turkestan Republic: | | | | | | |
| Amu Darja | — | — | — | — | 54 | 45 |
| Far Eastern Republic: | | | | | | |
| Transbaikal Government | — | — | — | — | 2 | 2 |
| *Siam* | 135 | 110 | 399 | 329 | 93 | 67 |
| *Straits Settlements* | 39 | 39 | 59 | 55 | 19 | 18 |
| Singapore | 39 | 39 | 53 | 49 | 18 | 17 |
| Malacca | 0 | 0 | 6 | 6 | 0 | 0 |
| Penang | 0 | 0 | 0 | 0 | 1 | 1 |
| *Syria* | 54 | 2 | 21 | — | 25 | — |
| Beyrut | 37 | 1 | 20 | — | 24 | — |
| Mount Lebanon | 0 | 0 | 1 | — | 1 | — |

* Compiled from quarterly returns for January to September and weekly returns from September 28th to December 27th, 1924.
** Confirmed cases and deaths only.
*a* From 1923 (October 1st) to May 28th, 1924, 344 cases, 318 deaths.
*b* From 1923 (October 19th) to February 5th, 1924, 90 cases, 89 deaths.

**Australia.**

| | | | | | | |
|---|---|---|---|---|---|---|
| Sydney | 46 | — | 1 | 0 | 0 | 0 |

## Cases of Plague reported in 1924.

## Cases of Plague reported in 1924.

**Europe.**

| Country | 1922 Cases | 1922 Deaths | 1923 Cases | 1923 Deaths | 1924 Cases | 1924 Deaths |
|---|---|---|---|---|---|---|
| *Bulgaria:* Varna | 0 | 0 | 0 | 0 | 0 | 0 |
| *Dodecanese:* Simi | — | — | — | — | 12 | 2 |
| *France:* St. Ouen (suburb of Paris) | 3 | — | 14 | — | 4 | — |
| *Greece* | 50 | — | 41 | 6 | 69* | 16* |
| *Italy:* Torre Annunziata | 18 | — | 1 | — | 0 | 0 |
| Naples | 1 | — | 0 | 0 | 2 | 1 |
| Portici | 0 | 0 | 0 | 0 | 1 | — |
| Catania | 2 | — | 0 | 0 | 0 | 0 |
| *Portugal*, Mainland: | | | | | | |
| Lisbon | 21 | 18 | 15 | 2 | 3 | 1 |
| Oporto | 0 | 0 | 0 | 1 | 0 | 0 |
| Azores: | | | | | | |
| St. Michael | 544 | 153 | 200 | 84 | 25 | 10 |
| Ponta Delgada | — | — | — | — | 21 | 10 |
| Terceira | — | — | — | — | 10 | 10 |
| Castello Branco | — | — | 2 | — | — | — |
| Horta | — | — | 1 | — | — | — |
| *Russia* (European): | | | | | | |
| Kalmuk region | 24 | 17 | 11 | 7 | 31 | 16 |
| Astrakhan Government | — | 0 | 0 | 0 | 14 | 14 |
| *Spain:* | | | | | | |
| Barcelona | 8 | — | 1 | — | — | — |
| Mijas | — | — | 2 | — | — | — |
| Malaga | — | — | 49 | — | — | — |
| Cartagena | 2 | — | — | — | — | — |
| Valencia | 2 | — | — | — | — | — |
| *Turkey in Europe:* | | | | | | |
| Constantinople | 29 | 10 | 12 | 3 | 5 | 2 |
| Yenikeui | — | — | — | — | 1 | — |
| Yenikeety | — | — | — | — | 1 | — |

* Geographical distribution of all cases and deaths not available.

## AFRICA.

### A. Northern Africa.

*Algeria.* — Seven cases of plague occurred in Algeria during 1924, of which two were in the city of Algiers, 1 in the city of Oran and 4 in the town of Mostaganem, in the department of Oran. This disease, which had been unknown in Algeria since 1822, reappeared in 1899. Since then, cases have frequently occurred and from 1916 plague has appeared regularly each year. The most important outbreak occurred from May 15th to August 25th, 1921, at Aumale, 130 km. from Algiers, when 185 cases, all bubonic, were notified, of which 97 were fatal. The following table, which shows the incidence of plague since 1899, has been taken from "La peste en Algérie", by Dr. Lucien Raynaud (*Archives de l'Institut Pasteur en Algérie*, Vol. II, Part 3, September 1924, pp. 303-361):

Cases of Human Plague in Algeria by Localities, 1899-1924.

| Localities | Years 1899 | 1900 | 1902 | 1903 | 1904 | 1907 | 1911 | 1912 | 1913 | 1916 | 1917 | 1918 | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | Totals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Philippeville | 3 | 0 | 0 | 0 | 3 | 14 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 36 |
| Bône | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| La Calle | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Bougie | 4 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| Alger | 1 | 3 | 1 | 0 | 3 | 0 | 0 | 8 | 9 | 0 | 0 | 4 | 3 | 8 | 8 | 1 | 4 | 2 | 55 |
| Ténès | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| Oran | 0 | 0 | 0 | 0 | 1 | 21 | 0 | 2 | 0 | 2 | 0 | 0 | 3 | 16 | 10 | 21 | 2 | 1 | 79 |
| Mostaganem | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 |
| Le Hamma | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| Aumale | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 185 | 0 | 0 | 0 | 185 |
| Blida | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Cases on ships | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| Constantine | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Total | 8 | 3 | 1 | 3 | 10 | 57 | 8 | 10 | 9 | 2 | 16 | 4 | 6 | 32 | 203 | 22 | 6 | 7 | 407 |

*Canary Islands.* — There were notified during 1924, 23 cases with 2 deaths, as against 46 cases with 27 deaths in 1923. The distribution was as follows:

| | 1923 | | 1924 | |
|---|---|---|---|---|
| | *Cases* | *Deaths* | *Cases* | *Deaths* |
| Island of Tenerife | 10 | — | 19 | 2 |
| Realejo Alta | — | — | 6 | 1 |
| Santa Cruz | — | — | 12 | 1 |
| La Laguna | — | — | 1 | — |
| Gran Canaria: | | | | |
| Las Palmas | 34 | 27 | 4 | — |
| San Juan de la Rambla | 2 | — | — | — |

*Egypt.* — Plague was less common than in 1923, as shown in the table given below:

Incidence of Plague in Egypt, 1915-1924.

| *Year* | *Cases* | *Deaths* | *Fatality rate* | *Year* | *Cases* | *Deaths* | *Fatality rate* |
|---|---|---|---|---|---|---|---|
| 1915 | 235 | 120 | 51.6 | 1920 | 462 | 269 | 58.2 |
| 1916 | 1,702 | 828 | 48.6 | 1921 | 356 | 153 | 42.9 |
| 1917 | 731 | 399 | 54.6 | 1922 | 487 | 228 | 46.8 |
| 1918 | 356 | 153 | 43.0 | 1923 | 1,519 | 725 | 47.7 |
| 1919 | 877 | 473 | 53.9 | 1924 | 377 | 194 | 51.5 |

It is noteworthy that only 2 cases occurred in Alexandria and 6 at Port Said; there were 20 cases in Suez and 58 in Minufia, which, however, constitutes a considerable improvement in the situation during the previous year in these regions. Only sporadic cases occurred elsewhere in Lower Egypt. The highest prevalence was reported in the oasis of Fayum (106 cases), while fewer cases than last year were notified elsewhere in Upper Egypt. The case fatality was relatively low in Fayum (31 per cent), as was also the case in 1922 and 1923. The details of geographical distribution for the last ten years are shown below:

Incidence of Plague and Deaths therefrom in Egypt, by Provinces, 1915–1924.

| « Governorates » et Provinces | 1915 | | 1916 | | 1917 | | 1918 | | 1919 | | 1920 | | 1921 | | 1922 | | 1923 | | 1924 | | Governorates and Provinces |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cas Cases | Décès Deaths | Cas Cases | Décès Deaths | Cas Cases | Décès Deaths | Cas Cases | Décès Deaths | Cas Cases | Décès Deaths | Cas Cases | Décès Deaths | Cas Cases | Décès Deaths | Cas Cases | Décès Deaths | Cas Cases | Décès Deaths | Cas Cases | Décès Deaths | |
| « Governorates»: | | | | | | | | | | | | | | | | | | | | | Governorates : |
| Le Caire | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | Cairo |
| Alexandrie | 10 | 5 | 61 | 35 | 17 | 9 | 4 | 3 | 9 | 5 | 13 | 4 | 137 | 46 | 71 | 36 | 67 | 33 | 2 | 2 | Alexandria |
| Ismaïlia | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | Ismailia |
| Port Saïd | 19 | 11 | 32 | 19 | 41 | 25 | 17 | 9 | 40 | 26 | 19 | 11 | 33 | 17 | 54 | 35 | 51 | 28 | 6 | 4 | Port Said |
| Quantaro | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Quantaro |
| Damiette | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Damietta |
| Suez | 0 | 0 | 1 | 0 | 318 | 195 | 0 | 0 | 126 | 76 | 87 | 55 | 93 | 58 | 58 | 33 | 47 | 24 | 20 | 13 | Suez |
| Régions frontières | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 49 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Frontier Districts |
| Basse Egypte: | | | | | | | | | | | | | | | | | | | | | Lower Egypt: |
| Beheira | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | Beheira |
| Daqualhiyeh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 1 | 1 | Daqualhiya |
| Gharbiyeh | 8 | 4 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | | 51 | 31 | 30 | 2 | 60 | 16 | 24 | 10 | 6 | 2 | Gharbiya |
| Minufiyeh | 0 | 0 | 21 | 14 | 0 | 0 | 0 | 0 | 17 | 4 | 1 | 1 | 0 | 0 | 1 | 1 | 292 | 97 | 58 | 36 | Minufiya |
| Qalyubiyeh | 1 | 0 | 4 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 74 | 10 | 14 | 4 | Qalyubiya |
| Sharkiyeh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | Sharqiya |
| Haute Egypte: | | | | | | | | | | | | | | | | | | | | | Upper Egypt: |
| Assiout | 59 | 31 | 296 | 144 | 36 | 23 | 9 | 4 | 304 | 152 | 177 | 106 | 20 | 12 | 47 | 28 | 358 | 203 | 44 | 35 | Assyut |
| Assouan | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | Aswan |
| Beni-Souef | 7 | 2 | 182 | 89 | 2 | 0 | 7 | 6 | 24 | 6 | 4 | 2 | 1 | 1 | 62 | 21 | 64 | 22 | 4 | 4 | Beni-Suef |
| Fayum | 80 | 39 | 726 | 340 | 148 | 77 | 34 | 18 | 63 | 27 | 4 | 3 | 1 | 1 | 33 | 11 | 34 | 11 | 106 | 33 | Fayum |
| Girgeh | 0 | 0 | 50 | 40 | 55 | 14 | 28 | 27 | 140 | 111 | 13 | 5 | 10 | 7 | 9 | 3 | 342 | 197 | 10 | 3 | Girga |
| Gizeh | 10 | 10 | 32 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | Giza |
| Minyeh | 41 | 18 | 285 | 127 | 51 | 20 | 254 | 83 | 137 | 55 | 35 | 15 | 29 | 8 | 87 | 39 | 107 | 48 | 58 | 28 | Minya |
| Keneh | 0 | 0 | 5 | 4 | 54 | 36 | 2 | 2 | 0 | 0 | 6 | 2 | 1 | 1 | 1 | 1 | 52 | 35 | 45 | 26 | Qena |
| Total | 235 | 120 | 1702 | 828 | 731 | 399 | 356 | 153 | 877 | 473 | 462 | 269 | 356 | 153 | 487 | 228 | 1519 | 725 | 377 | 194 | Total. |

107 deaths occurred in hospitals and 87 outside of hospitals. The bubonic type prevailed, 288 cases, of which 107 were fatal, being classified as such. Only 7 fatal cases were reported as being of the pneumonic type, as against 120 in 1923.

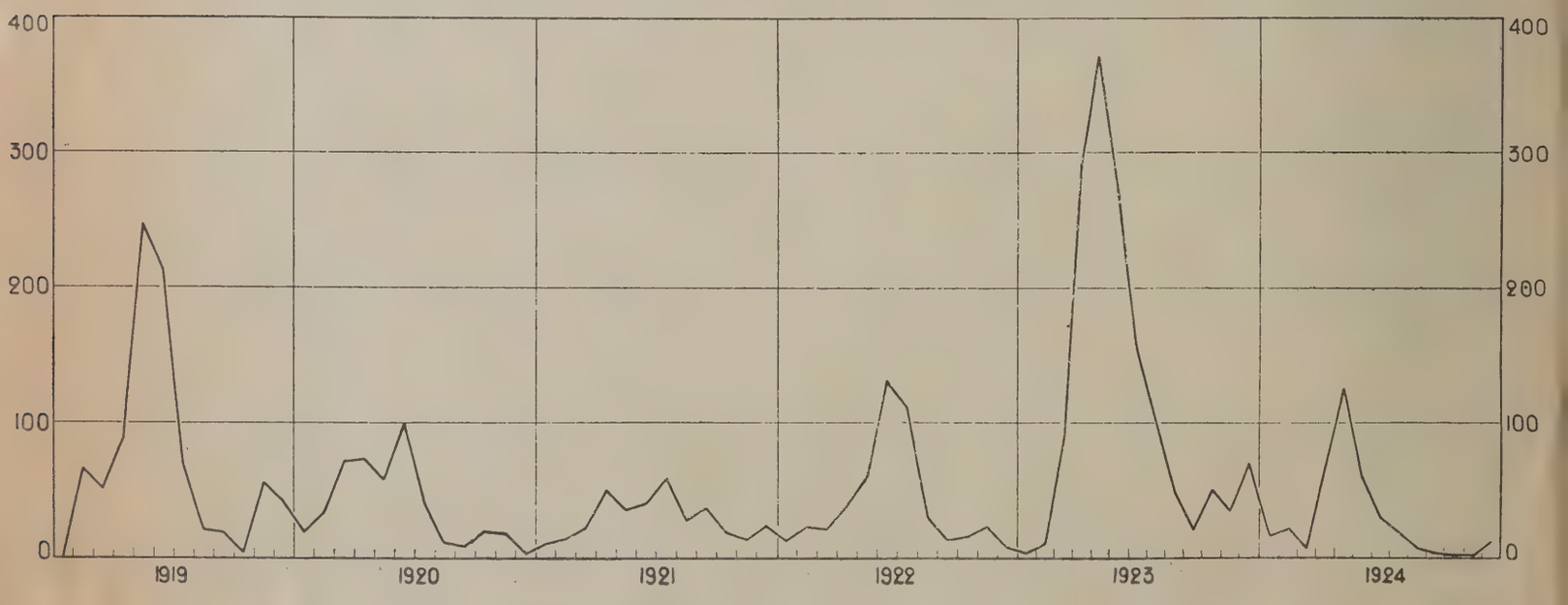
The seasonal maximum occurred in May, after which the incidence declined rapidly and only sporadic cases were reported during the last five months of the year.

Seasonal Variations of Plague in Egypt, 1921-1923.

| *Month* | 1921 | | 1922 | | *4-weekly periods* | 1923 | | 1924 | |
|---|---|---|---|---|---|---|---|---|---|
| | *Cases* | *Deaths* | *Cases* | *Deaths* | | *Cases* | *Deaths* | *Cases* | *Deaths* |
| January | 11 | 9 | 12 | 6 | 1st | 3 | 2 | 17 | 16 |
| February | 14 | 6 | 23 | 12 | 2nd | 11 | 7 | 22 | 15 |
| March | 23 | 12 | 21 | 8 | 3rd | 89 | 46 | 6 | 3 |
| April | 51 | 23 | 39 | 17 | 4th | 295 | 148 | 67 | 40 |
| May | 36 | 17 | 60 | 30 | 5th | 371 | 221 | 126 | 56 |
| June | 41 | 11 | 131 | 48 | 6th | 267 | 116 | 60 | 24 |
| July | 60 | 23 | 112 | 56 | 7th | 155 | 60 | 30 | 18 |
| August | 28 | 6 | 30 | 19 | 8th | 102 | 36 | 19 | 10 |
| September | 37 | 19 | 13 | 9 | 9th | 48 | 15 | 7 | 3 |
| October | 18 | 9 | 16 | 9 | 10th | 21 | 10 | 3 | 1 |
| November | 13 | 5 | 23 | 10 | 11th | 51 | 25 | 2 | 1 |
| December | 24 | 13 | 7 | 4 | 12th | 35 | 10 | 2 | 1 |
| | | | | | 13th | 71 | 29 | 12 | 12 |
| Totals | 356 | 153 | 487 | 228 | | 1,519 | 725 | 373* | 193* |

* There were, in addition, 4 cases and 1 death for which the date has not been given.

Cases of Plague notified in Egypt from 1919 to 1924.




*Morocco.* — There were 53 cases in 1924, all during the first half of the year, as against 134 in 1923. Plague was introduced into Morocco two years after the French occupation, and a severe epidemic followed in 1911, when 10,000 deaths were reported. About 1,000 deaths occurred the following year, since when the number has diminished greatly, though some endemic centres persist.

*Tunisia.* — Eleven cases were reported, of which 4 occurred on the Island of Djerba, as against 31 in 1923.

## B. West Coast of Africa.

*Angola.* — There were reported in 1924, 66 cases with 24 deaths, namely, 8 cases and 2 deaths in Loanda; 37 cases and 12 deaths in Benguela; 8 cases in Lobito and 13 in Mossamedes. Altogether, 96 cases with 29 deaths occurred during 1923 and 600 cases during 1922.

*Gold Coast.* — An outbreak of plague occurred in March, which reached its maximum in July; about 200 cases were reported in Coomassie and 122 in Sekondi during the year. The case fatality was high (85 per cent). The monthly incidence is given below.

Plague Cases and Deaths in the Gold Coast, 1924.

| *Month* | *Cases* | *Deaths* | *Month* | *Cases* | *Deaths* |
|---|---|---|---|---|---|
| | | | *Brought forward* | 128 | 100 |
| January | 0 | 0 | July | 96 | 82 |
| February | 0 | 0 | August | 46 | 39 |
| March | 44 | 24 | September | 37 | 38 |
| April | 57 | 49 | October | 4 | 4 |
| May | 5 | 5 | November | 7 | 6 |
| June | 22 | 22 | December | 4 | 4 |
| *Carried forward* | 128 | 100 | Total | 322 | 273 |

*Mauritania.* — There occurred in Port Etienne 11 cases with 5 deaths.

*Nigeria.* — Plague was introduced into Lagos in July and a severe epidemic followed, which culminated in October. The case fatality was high (82 per cent).

Plague Cases and Deaths in Lagos, Nigeria, 1924.

| *Month* | *Cases* | *Deaths* | *Month* | *Cases* | *Deaths* |
|---|---|---|---|---|---|
| January to June | 0 | 0 | *Brought forward* | 141 | 126 |
| July | 1 | 1 | October | 176 | 138 |
| August | 7 | 7 | November | 78 | 61 |
| September | 133 | 118 | December | 17 | 13 |
| *Carried forward* | 141 | 126 | Total | 412 | 338 |

*Senegal.* — Plague was more prevalent in 1924 in Senegal than in either of the two previous years. The outbreak began in March and reached its maximum in May.

Plague Cases and Deaths in Senegal, 1919-1924.

| *Year* | *Cases* | *Deaths* | *Year* | *Cases* | *Deaths* |
|---|---|---|---|---|---|
| 1919 | 5,761 | 4,276 | 1922 | 874 | 490 |
| 1920 | 7,999 | 5,879 | 1923 | 1,221 | 846 |
| 1921 | 1,799 | 1,241 | 1924 | 1,831 | 1,071 |

The majority of cases occurred in the district of Cayor. Dakar and Rufisque were free from plague during 1924. The geographical distribution is given below.

Plague in Senegal by Districts, 1923 and 1924.

| | 1923 | | 1924 | | | 1923 | | 1924 | |
|---|---|---|---|---|---|---|---|---|---|
| *District* | *Cases* | *Deaths* | *Cases* | *Deaths* | *District* | *Cases* | *Deaths* | *Cases* | *Deaths* |
| Cayor | 404 | 216 | 1,338 | 795 | Baol | 11 | 12 | 32 | 19 |
| Louga | 0 | 0 | 156 | 85 | Sassiraya | 0 | 0 | 4 | 2 |
| Thies | 349 | 234 | 193 | 92 | Dakar | 17 | 5 | 0 | 0 |
| Sine Saloum | 133 | 139 | 116 | 74 | Rufisque | 294 | 236 | 0 | 0 |

## C. East Coast of Africa.

*Kenya.* — 477 cases were reported in 1924, as against 1,090 during the previous year. Most of the cases occurred in the province of Nyama. Only 1 case occurred at Mombassa.

*Madagascar.* — The incidence of plague has increased rapidly since 1922; 1,661 cases were reported in 1924 as against 698 in 1923 and 125 in 1922. The case fatality was high (81 per cent). 1,426 cases occurred at Tananarive and 235 in other localities. In 1923, 690 cases occurred at Tananarive and only 8 elsewhere. The highest number of cases was reported in February, the lowest in May.

*Mauritius.* — Plague has been endemic in Mauritius since 1898; no case was reported in 1920, but a fresh outbreak occurred the following year and the incidence increased again in 1923 and 1924.

Plague Cases and Deaths in Mauritius, 1921-1924.

| *Year* | *Cases* | *Deaths* | *Year* | *Cases* | *Deaths* |
|---|---|---|---|---|---|
| 1921 . . . . . | 375 | 297 | 1923 . . . . . | 138 | 118 |
| 1922 . . . . . | 98 | 75 | 1924 . . . . . | 161 | 146 |

*Somaliland (Italian).* — An outbreak of plague, which lasted from November 1923 to February 1924, centred in the village of Bulguti; 82 cases were isolated. Among 62 which were treated with serum, only 10 died, while of the 21 which did not receive serum treatment 18 died. Plague outbreaks occurred in the colony in 1913 (172 cases), 1918-1919 (139 cases), and 1920-1921 (601 cases).

*Tanganyika Territory.* — There were 42 cases and 35 deaths during 1924, an incidence similar to that of the two preceding years.

*Uganda.* — The incidence of plague has declined continuously since 1921, when 5,871 deaths from this disease were reported; there were 1,305 deaths in 1922, 914 in 1923 and 534 in 1924. The seasonal distribution is shown below.

Plague Cases and Deaths in Uganda, by Month, 1923 and 1924.

| | 1923 | | 1924 | | | 1923 | | 1924 | |
|---|---|---|---|---|---|---|---|---|---|
| *Month* | *Cases* | *Deaths* | *Cases* | *Deaths* | *Month* | *Cases* | *Deaths* | *Cases* | *Deaths* |
| January . . . . | 73 | 73 | 36 | 35 | *Brought forward* | 479 | 464 | 337 | 292 |
| February . . . . | 27 | 27 | 31 | 29 | August . . . . | 114 | 107 | 79 | 62 |
| March. . . . . | 18 | 15 | 14 | 13 | September . . . | 104 | 104 | 56 | 52 |
| April . . . . . | 7 | 5 | 14 | 12 | October . . . . | 97 | 94 | 45 | 39 |
| May . . . . . | 70 | 66 | 28 | 23 | November. . . . | 94 | 89 | 62 | 58 |
| June . . . . . | 112 | 114 | 97 | 84 | December . . . | 60 | 56 | 37 | 32 |
| July . . . . . | 172 | 164 | 117 | 96 | | | | | |
| *Carried forward* | 479 | 464 | 337 | 292 | Total . | 948 | 914 | 616 | 535 |

## D. South Africa.

*Union of South Africa.* — A serious outbreak occurred during 1923 and 1924 in the Union. The first 7 cases were reported in October 1923 on two farms north-west of Uitenhage; in December, 4 other cases were found in Hoopstad and Kronstad districts in an area where veld-rodents are very numerous and badly flea-infested. During January and February 1924, the epidemic spread to the Winburg, Vredeford, Boshof, Bethulie, Bloemfontein, Senekal, Lindley, Brandford and Helibron districts in the Orange Free State. At the end of February, the Albert district of Cape Province was found to be infected; later the Colesberg district was affected. Small outbreaks occurred in April in the Krugersdorp and Volmaranstad districts of the Transvaal.

The epidemic reached its maximum during the week ending March 1st, 1924 (40 cases, 21 deaths), and declined in April and May; only 8 cases and 5 deaths were reported during June, July and August.

The geographical distribution of cases and deaths was as follows:

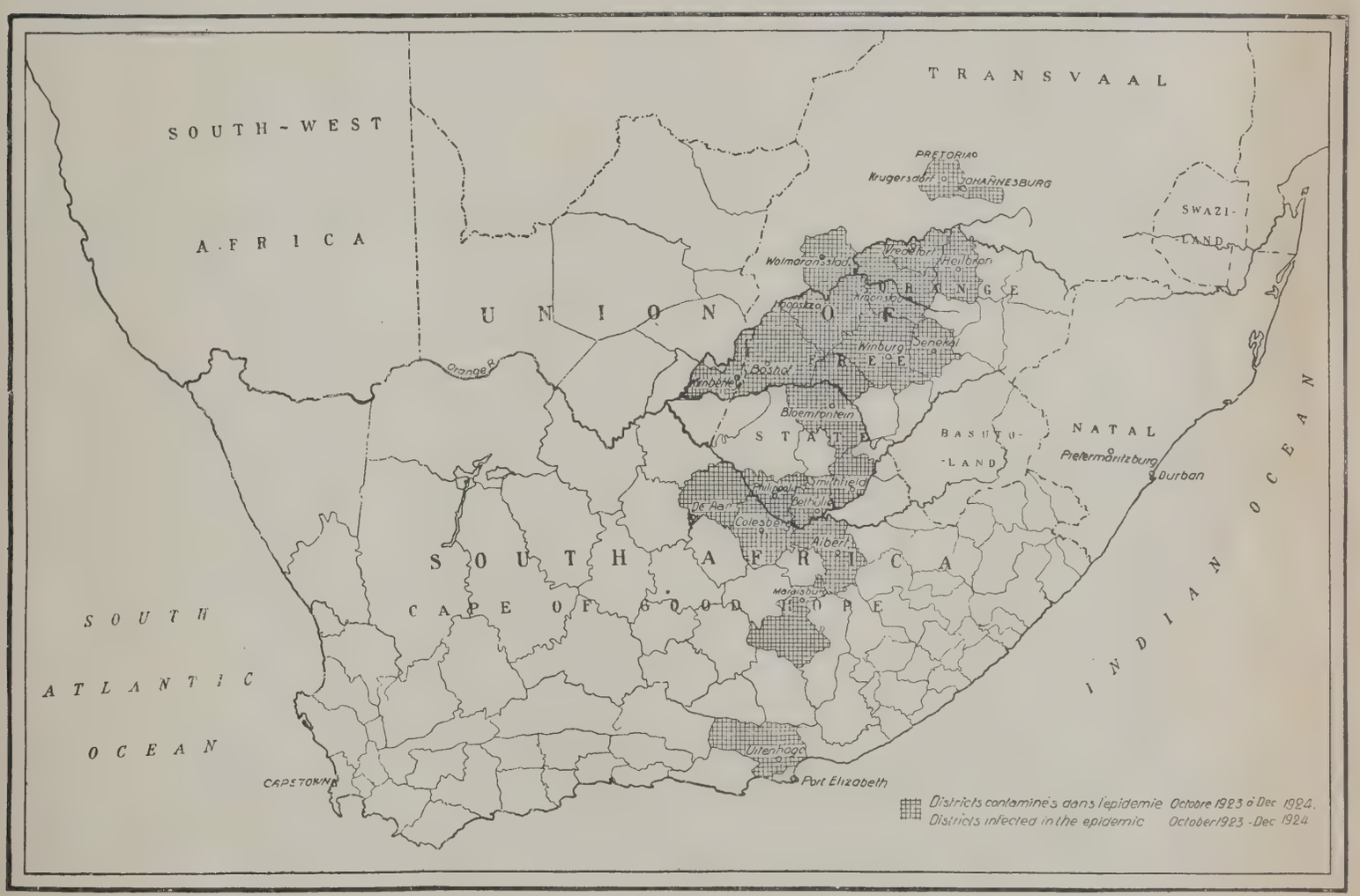
| | *October 1923 to June 1924* | | *July–December 1924* | |
|---|---|---|---|---|
| *Province* | *Cases* | *Deaths* | *Cases* | *Deaths* |
| Cape Colony . . . . . | 34 | 26 | 29 | 20 |
| Natal . . . . . | 0 | 0 | — | — |
| Transvaal . . . . . | 9 | 5 | 1 | 1 |
| Orange Free State . . . . . | 329 | 204 | 21 | 15 |
| Total . . . . . | 372 | 235 | 51 | 36 |

Of the 400 cases which occurred in 1924, 47 were among whites and 353 among natives. There were 23 deaths among the former, giving a case fatality of 49 per cent, and 223 deaths among the natives, giving a case fatality of 66 per cent.

85 per cent of the cases were of the bubonic type, 12 per cent pneumonic and 3 per cent septicæmic. All the bubonic cases, with the exception of 3, occurred on farms. A history of contact with previous cases could be established in all the pneumonic cases; of these, all of which were fatal, 11 were European and 32 native.

The human plague epidemic was undoubtedly caused by a severe epizootic among the veld-rodents, which occurred in the extensive grain-lands of the north-western Orange Free State, where, at the beginning of the epizootic, enormous quantities of maize, hay and forage were stacked, entirely unprotected against rodents.

Districts Infected with Plague in the Union of South Africa, October 1923 to December 1924.




The human plague epidemic followed the rodent epizootic very closely, both as regards time and intensity. In some of the worst-infected districts, Kronstad, Vredeford, Hoopstad and Winburg, it is estimated that 80 to 90 per cent of the veld-rodents, mainly gerbilles *(Tatera lobengulæ)*, and from 30 to 40 per cent of the associated small carnivora (mongoose, *Cynictis penicillata*, and suricates) died from plague.

Plague infection was established during the epidemic among the following rodents and other veld-animals:

Gerbille *(Tatera lobengulæ)*
Multimammate mouse *(Rattus coucha)*
Large-eared mouse *(Malacothrix)*
Striped mouse *(Rhabdomis pumilio)*
Karoo rat *(Parotomys luteolus)*
Ground squirrel *(Geosciurus capensis)*
Spring hare *(Pedetes caffer)*
Black rat *(Rattus rattus)*
House mouse *(Mus musculus)*
Yellow mongoose *(Cynictis penicillata)*

The seasonal distribution of the cases is shown in the table below.

Plague Cases and Deaths in the Union of South Africa, by months, 1923-1924.

| Month | 1923 Cases | 1923 Deaths | 1924 Cases | 1924 Deaths | Month | 1923 Cases | 1923 Deaths | 1924 Cases | 1924 Deaths |
|---|---|---|---|---|---|---|---|---|---|
| January | 0 | 0 | 35 | 16 | *Brought forward* | 0 | 0 | 353 | 212 |
| February | 0 | 0 | 111 | 64 | August | 0 | 0 | 1 | 1 |
| March | 0 | 0 | 109 | 61 | September | 0 | 0 | 0 | 0 |
| April | 0 | 0 | 70 | 59 | October | 7* | 7 | 0 | 0 |
| May | 0 | 0 | 21 | 8 | November | 4 | 1 | 24 | 18 |
| June | 0 | 0 | 3 | 2 | December | 9 | 4 | 22 | 15 |
| July | 0 | 0 | 4 | 2 | | | | | |
| *Carried forward* | 0 | 0 | 353 | 212 | Total | 20 | 12 | 400 | 246 |

* Three of these cases occurred in August and September, but were only brought to light by later investigation.

## AMERICA.

### A. North America.

*United States.* — An outbreak of pneumonic plague occurred in October and November at Los Angeles in California. Forty cases, of which 34 were fatal, were reported, only 5 cases being bubonic. The first case appears to have occurred on October 1st and was diagnosed as "double lobar pneumonia", the fifth case (occurring on October 22nd, followed by death on the 25th) being the first to be diagnosed as "pneumonic plague". During the same week, 13 relations or friends who had visited the infected household fell ill and died. The last human case of the epidemic occurred on November 18th, but an isolated case was reported on January 6th, 1925.

Plague infection among rats was established, while no infection of ground squirrels was found. The infected areas were insanitary districts with buildings infested with rats.

It will be recalled that bubonic plague appeared in 1889 in San Francisco and again in 1906 after the earthquake; in the latter instance, the cases were scattered over some years, during which the city was being rebuilt. Only a few cases have been observed since then, and the disease does not appear to have been endemic in Southern California. A prolonged campaign to exterminate ground-squirrels, started in 1908, has been restricted in recent years for economic reasons.

*Hawaii.* — There were 2 fatal cases in Honokaa and 1 in Hamakua; 1 fatal case was reported in Honokaa in 1923.

### B. South America.

*Argentine.* — There were a few cases of plague in various ports and inland towns in this Republic during 1924, namely, 2 cases in Bahia Blanca, 1 in Rosario, 5 in Santos and 6 in Cordoba.

*Bolivia.* — 10 cases of plague were reported in the city of La Paz, where 4 cases occurred in 1923.

*Brazil.* — 24 cases were reported during 1924 in various ports (namely, 1 in Rio de Janeiro, 9 in Bahia and 14 in Porto Alegre) as against 53 cases during the previous year.

*Chile.* — Sixteen cases occurred at Antofagasta in the northern part of the country.

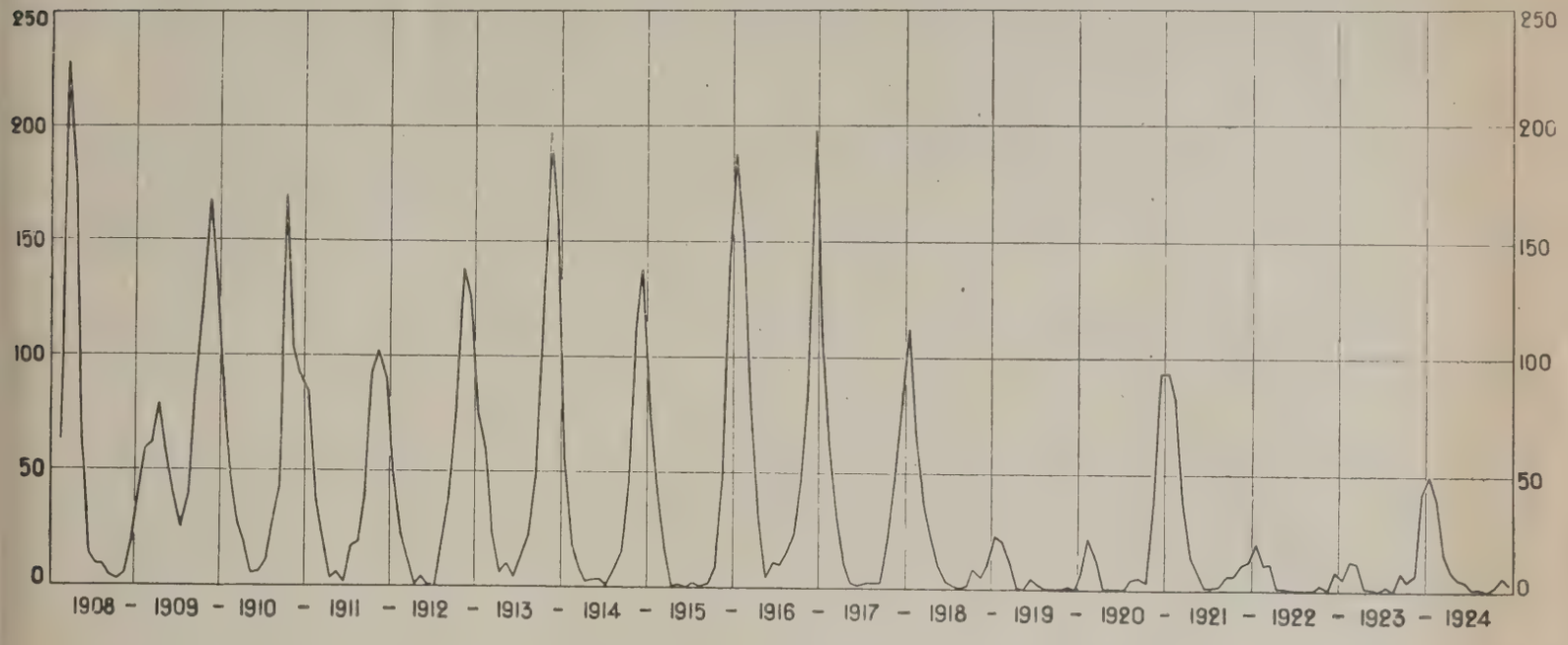
*Ecuador.* — Plague first appeared in Guayaquil in February 1908, having probably been imported from Callao. A slight increase in the number of cases has been reported during the last two years, but the incidence is still much lower than during the period 1908-1918. The case fatality has always been relatively low and was 33 per cent in 1924.

Plague Cases and Deaths in Guayaquil, 1908-1924.

| Year | Cases | Deaths | Year | Cases | Deaths |
|---|---|---|---|---|---|
| 1908 | 588 | 274 | 1917 | 372 | 153 |
| 1909 | 903 | 320 | 1918 | 279 | 105 |
| 1910 | 675 | 266 | 1919 | 66 | 22 |
| 1911 | 513 | 202 | 1920 | 187 | 55 |
| 1912 | 485 | 188 | 1921 | 270 | 95 |
| 1913 | 727 | 304 | 1922 | 56 | 19 |
| 1914 | 409 | 158 | 1923 | 101 | 32 |
| 1915 | 327 | 109 | 1924 | 140 | 46 |
| 1916 | 843 | 321 | | | |

A determined campaign against rats is being carried on and 1,205,000 have been exterminated during the four years 1921-1924. A few cases of plague occurred in the Chimbarosi province, on the railway line from Guayaquil to Quito. The seasonal maximum occurs usually between December and February during the rainy season.

Cases of Plague notified in Guayaquil since its Appearance in 1908 until December 1924.




*Peru.* — Fewer cases of plague were reported in Peru than in any one of the previous ten years.

Plague Cases and Deaths in Peru, 1915-1924.

| *Year* | *Cases* | *Deaths* | *Year* | *Cases* | *Deaths* |
|---|---|---|---|---|---|
| 1915 | 455 | 241 | 1920 | 758 | 392 |
| 1916 | 508 | 265 | 1921 | 870 | 505 |
| 1917 | 444 | 211 | 1922 | 801 | 369 |
| 1918 | 825 | 389 | 1923 | 855 | 393 |
| 1919 | 654 | 340 | 1924 | 274* | 108* |

* Up to October 31st only.

The highest number of cases occurred in the city of Lima, where 126 cases were reported during the first ten months of 1924, as against 294 during the previous year. The case fatality was relatively low (39 per cent in 1924), although slightly higher than in Guayaquil.

## ASIA.

### A. Near East.

*Iraq.* — There were fewer cases of plague in 1924 than during the two previous years; 218 cases were reported in Bagdad, 111 in Basrah and 210 in other localities. The case fatality remained at 58 per cent, as in 1923. The seasonal maximum occurs in May.

Plague Cases and Deaths, by months, in Iraq, 1923-1924.

| | 1923 | | *Four-weekly* | 1924 | |
|---|---|---|---|---|---|
| *Month* | *Cases* | *Deaths* | *periods* | *Cases* | *Deaths* |
| January | 3 | 1 | I | 10 | 4 |
| February | 10 | 8 | II | 37 | 31 |
| March | 18 | 8 | III | 20 | 10 |
| April | 100 | 51 | IV | 101 | 68 |
| May | 375 | 236 | V | 198 | 99 |
| June | 152 | 86 | VI | 131 | 78 |
| July | 29 | 9 | VII | 20 | 12 |
| August | 2 | 1 | VIII | 5 | 2 |
| September | 2 | 1 | IX | 2 | 2 |
| October | 1 | 0 | X | 0 | 0 |
| November | 1 | 0 | XI | 1 | 1 |
| December | 15 | 12 | XII | 1 | 0 |
| | | | XIII | 3 | 1 |
| Total | 708 | 413 | Total | 529 | 308 |

*Palestine.* — There were only 2 cases — all in Jaffa — during 1924, as against 15 cases in 1923 and 64 in 1922.

*Persia.* — 352 cases and 214 deaths were reported during 1924, of which 119 were in Abadan (481 in 1923) and 149 in Mohammerah (71 in 1923).

*Asiatic Russia.*— Several endemic centres of plague exist in Turkestan and the Kirghiz Republic. Fifty-four cases, 45 of which were fatal, were reported in the Amu Darja region of Turkestan during April and May, the outbreak terminating in June. An outbreak in the governments of Bukejev and Uralsk, in the Kirghiz Republic, north of the Caspian Sea, lasted from October 1923 to May 1924, in all 434 cases with 407 deaths being reported.

Cases have also occurred on the steppes farther west in the government of Astrakhan (14 fatal cases during January and February) and the Kalmuk autonomous area (31 cases and 16 deaths from April to December 1924), both of which are considered as part of European Russia. Plague-infection has been established among the rodents on the steppes.

*Syria.* — Twenty-four cases of plague were reported in Beyrouth and 1 in Lebanon, as against 20 and 1 respectively in 1923.

*Turkey.* — Fourteen cases were reported in April in Trebizond. There were also 7 cases in Turkey-in-Europe, of which 5 occurred in Constantinople.

## B. India and Ceylon.

*British India.* — The seasonal variation of plague incidence in India is characterised by the same regularity as is shown by the climatic conditions. The maximum prevalence for India as a whole falls always between March and May, the minimum occurring in July. The final statistical analysis of plague incidence is therefore usually made for "plague years" ending June 30th.

The plague year 1923-24 has been the most unfavourable since 1917-1918, nearly twice as many deaths from this disease having occurred as during the previous plague year, and nearly seven times as many as in 1922-23. Mortality from plague is shown below for the five last plague years; these data have been compiled from the complete quarterly returns, which differ considerably from the provisional weekly data; the latter are, however, most useful in indicating the current seasonal fluctuations. By adding the figures for all the weekly returns for 1923-24, the sum of 271,047 deaths is obtained, as against the total of 408,977 shown by the quarterly returns; hence the difference between the figures given in this Report and those which have appeared in the *Monthly Epidemiological Reports*, in which, obviously, the provisional data are used.

Deaths from Plague in India, 1919-1924.

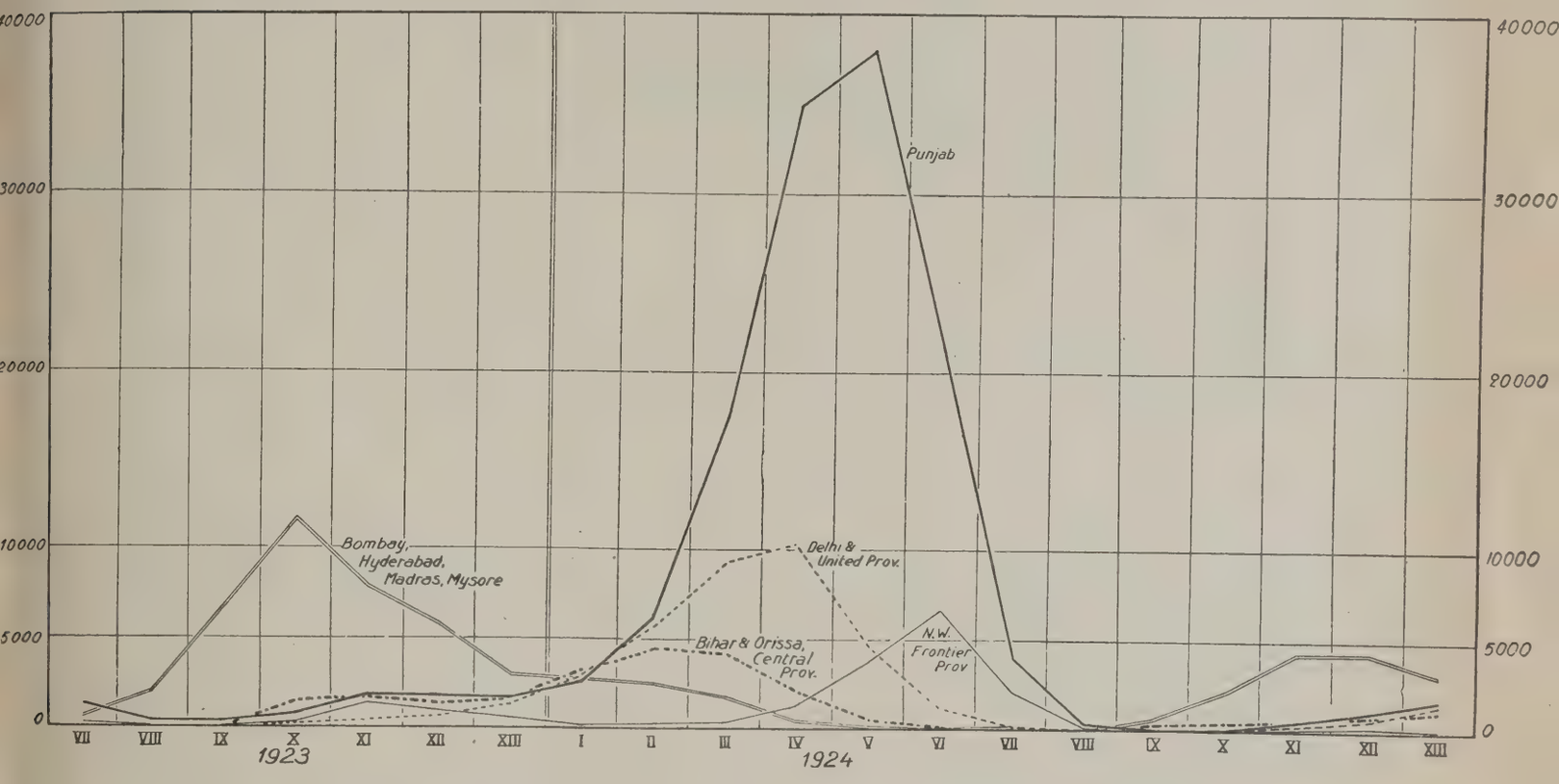
| *Provinces* | 1919-1920 | 1920-1921 | 1921-1922 | 1922-1923 | 1923-1924 | *Annual Incidence for last 25 plague years* 1898-1923 |
|---|---|---|---|---|---|---|
| N.W. Frontier Province | — | — | — | 937 | 13,828 | — |
| Punjab | 6,552 | 1,959 | 7,876 | 41,703 | 246,264 | 122,460 |
| Delhi | — | — | — | 2,574 | 2,563 | — |
| United Provinces | 23,483 | 25,374 | 12,039 | 76,311 | 54,427 | 101,643 |
| Bihar and Orissa | 18,682 | 17,202 | 8,559 | 29,519 | 11,478 | 41,849 |
| Central Provinces and Berar | 17,972 | 4,149 | 7,561 | 23,603 | 13,950 | 17,406 |
| Central India | 3,972 | 374 | 239 | 816 | 397 | 5,950 |
| Rajputana | 42 | 849 | 4 | 0 | 48 | 11,129 |
| Bombay | 12,344 | 9,926 | 4,606 | 14,821 | 28,094 | 94,252 |
| Hyderabad | 20,861 | 9,404 | 733 | 9,792 | 13,736 | 12,089 |
| Mysore | 5,269 | 9,675 | 6,771 | 5,797 | 5,091 | 10,269 |
| Madras | 6,875 | 18,217 | 7,179 | 11,441 | 7,739 | 8,109 |
| Bengal | 77 | 58 | 136 | 80 | 2 | 2,789 |
| Burma | 5,464 | 3,964 | 6,517 | 8,154 | 5,566 | 4,792 |
| Bengalore | — | — | — | 468 | 57 | — |
| Jind State | — | — | — | 1,822 | 5,547 | — |
| Kolhapur State | — | — | — | 37 | 190 | — |
| Total | 121,593 | 101,151 | 62,220 | 227,875 | 408,977 | 432,737 |

The seasonal incidence differs in the north and south, the maximum occurring usually in the second half of the year in Southern India and in the first half in Northern India. It is seen from the accompanying diagram that, during the plague year 1923-24, the maximum occurred in September or October in Southern India, in February or March in the Central Provinces and Middle Ganges Valley, in March or April in the Upper Ganges Valley, at the end of April

in the Punjab, and not until the end of May in the extreme North-West. This is the normal seasonal prevalence. The intensity of the outbreak increased steadily in the same direction, and the later the maximum occurred, or the more severe the epidemic, the more abrupt the decline.

The Punjab was the most severely infected region, the death rate from plague being 12 per 1,000 inhabitants during the calendar year 1924. This rate is about equal to that of 1915, and the severity of the epidemic was only exceeded in 1904, 1905 and 1907. A high mortality from plague (5.4 per 1,000) was reported also in Delhi and in the North-West Frontier Province, where plague had never occurred before in epidemic form.

Seasonal Movement of Plague Mortality in the Geographical Divisions of British India from July 1923 to December 1924.




Plague has caused at least 11,220,000 deaths in India since its introduction in 1898 up to the end of 1924.

Plague Mortality in India by Provinces, 1923-1924.

| *Provinces* | *Population (Census 1921)* | 1923 | 1924 | *Rate per 100,000 for 1924* |
|---|---|---|---|---|
| North-West Frontier Province | 2,251,340 | 3,738 | 12,105 | 537.7 |
| Punjab | 20,685,000 | 49,723 | 248,950 | 1,203.6 |
| Delhi | 448,188 | 2,795 | 2,435 | 543.3 |
| United Provinces | 45,590,946 | 74,088 | 52,909 | 1,16.1 |
| Bihar and Orissa | 33,998,778 | 28,822 | 10,549 | 31.0 |
| Central Provinces | 13,908,514 | 26,297 | 10,736 | 77.2 |
| Bombay | 19,839,981 | 32,165 | 8,142 | 41.0 |
| Hyderabad | 12,471,770 | * | 11,325 | 90.8 |
| Mysore | 5,978,892 | * | 1,836 | 30.7 |
| Madras | 42,497,246 | 11,719 | 3,642 | 8.6 |
| Bengal Presidency | 46,695,536 | 82 | 35 | 0.07 |
| Assam | 7,990,246 | 0 | 0 | 0 |
| Burma | 13,205,564 | 7,628 | 4,302 | 32.6 |
| Other Indian States and agencies | 53,380,000 | 4,424 | 10,923 | 20.5 |
| Total | 318,942,001 | 239,481 | 377,889 | 118.5 |

* Data not received.

*Ceylon.* — Plague was introduced into Colombo late in 1913 or early in 1914, the first case occurring in January of the latter year, since when cases have occurred each year. In 1924 there were 153 cases, 131 of which were fatal. The case fatality was very high (91 per cent), as it has always been in Colombo.

CASES OF PLAGUE REPORTED IN COLOMBO, BY MONTHS, 1915-1924.

| *Months* | 1914 | 1915 | 1916 | 1917 | 1918 | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | *Four weeks ending:* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| January | 4 | 19 | 17 | 25 | 13 | 0 | 25 | 65 | 13 | 28 | 38 | January 26 |
| February | 67 | 6 | 18 | 40 | 18 | 1 | 20 | 53 | 10 | 32 | 24 | February 23 |
| March | 58 | 3 | 18 | 61 | 10 | 3 | 3 | 27 | 6 | 11 | 12 | March 22 |
| April | 28 | 3 | 14 | 34 | 11 | 0 | 3 | 7 | 2 | 17 | 24 | April 19 |
| May | 29 | 3 | 11 | 11 | 2 | 0 | 4 | 2 | 7 | 9 | 11 | May 17 |
| June | 49 | 1 | 36 | 3 | 9 | 0 | 3 | 1 | 8 | 10 | 5 | June 14 |
| July | 47 | 5 | 43 | 6 | 2 | 0 | 12 | 3 | 10 | 21 | 5 | July 12 |
| August | 40 | 20 | 35 | 1 | 1 | 2 | 7 | 2 | 7 | 23 | 15 | August 9 |
| September | 18 | 21 | 25 | 3 | 0 | 5 | 18 | 2 | 7 | 26 | 3 | September 6 |
| October | 23 | 24 | 24 | 7 | 0 | 18 | 28 | 9 | 14 | 12 | 1 | October 4 |
| November | 24 | 10 | 25 | 10 | 2 | 34 | 34 | 4 | 19 | 13 | 3 | November 1 |
| December | 26 | 24 | 25 | 6 | 2 | 24 | 78 | 9 | 33 | 28 | 8 | November 29 |
| | | | | | | | | | | | 4 | December 27 |
| TOTAL: Cases | 413 | 139 | 291 | 207 | 70 | 87 | 235 | 184 | 136 | 230 | 153 | |
| Deaths | 381 | 128 | 273 | 196 | 69 | 82 | 223 | 170 | 131 | 213 | 131 | |

Plague outbreaks have been rare elsewhere in Ceylon, none having been reported in 1924.

## C. FAR EAST.

*China.* — Eighteen deaths from plague were reported in Amoy, 31 in Nanking and 25 in Foochow during 1924.

*Dutch East Indies.* — Plague was introduced into Java in 1911 and serious epidemics followed, culminating in 1913 and 1914. The disease was confined to Eastern Java and the district of Madiun up to 1915, Pasuruan and Kediri being the most severely infected districts. Fewer cases were reported from 1916 to the second half of 1919, during which period the infection spread, however, into the districts of Central Java, where a new series of epidemics broke out and are still continuing. The disease remains relatively rare in Eastern Java.

DEATHS FROM PLAGUE IN JAVA AND MADURA, BY PROVINCES, 1911-1924.

| *Provinces* | 1911 | 1912 | 1913 | 1914 | 1915 | 1916 | 1917 | 1918 | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | *Rate per 100,000* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bantam | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Batavia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 5 | 0 | 0 | 0 | 0 |
| Preanger | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Cheribon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 272 | 350 | 20.3 |
| Total in West Java | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 5 | 11 | 272 | 351 | 3.8 |
| Pekalongan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 64 | 190 | 754 | 614 | 26.1 |
| Semarang | 0 | 0 | 0 | 0 | 0 | 15 | 169 | 255 | 200 | 449 | 2,248 | 1,418 | 1,789 | 1,549 | 58.1 |
| Banjumas | 0 | 0 | 0 | 0 | 0 | 0 | 1* | 0 | 0 | 0 | 0 | 0 | 0 | 2,147 | 119.6 |
| Kedu | 0 | 0 | 0 | 0 | 0 | 0 | 1* | 241 | 2,583 | 8,406 | 3,987 | 4,533 | 2,781 | 3,648 | 148.8 |
| Djokjakarta | 0 | 0 | 0 | 0 | 0 | 2 | 8 | 5 | 2* | 2 | 0 | 188 | 317 | 163 | 12.3 |
| Surakarta | 0 | 0 | 2 | 5 | 1,406 | 575 | 41 | 12 | 0 | 14 | 3,112 | 4,489 | 2,685 | 4,468 | 211.8 |
| Madiun | 41 | 148 | 1,036 | 1,316 | 78 | 47 | 65 | 39 | 0 | 4* | 0 | 0 | 0 | 0 | 0 |
| Total in Central Java | 41 | 148 | 1,038 | 1,321 | 1,484 | 639 | 284 | 552 | 2,785 | 8,875 | 9,411 | 10,818 | 7,572 | 12,589 | 87.9 |
| Rembang | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 |
| Surabaya | 32 | 49 | 370 | 1,010 | 331 | 216 | 100 | 182 | 165 | 218 | 97 | 65 | 63 | 48 | 1.9 |
| Madura | 0 | 0 | 30 | 91 | 1 | 0 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kediri | 125 | 573 | 2,984 | 4,098 | 1,776 | 244 | 8 | 0 | 4* | 0 | 57 | 52 | 14 | 39 | 1.9 |
| Pasuruan | 1,957 | 1,506 | 6,964 | 9,236 | 2,645 | 89 | 1* | 0 | 0 | 17 | 103 | 20 | 0 | 49 | 2.6 |
| Besuki | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 53 | 0 | 0 | 2 | 0.1 |
| Total in East Java | 2,114 | 2,128 | 10,348 | 14,435 | 4,753 | 549 | 137 | 182 | 169 | 235 | 311 | 138 | 831 | 48 | 1.3 |
| Total in all Java | 2,155 | 2,276 | 11,386 | 15,756 | 6,237 | 1,188 | 431 | 734 | 2,954 | 9,123 | 9,727 | 10,967 | 8,675 | 13,078 | 37.3 |
| Number of pneumonic cases | 51 | 10 | 23 | 563 | 489 | 56 | 63 | 44 | 57 | 162 | 620 | 939 | 355 | 0 | |

* Imported cases.

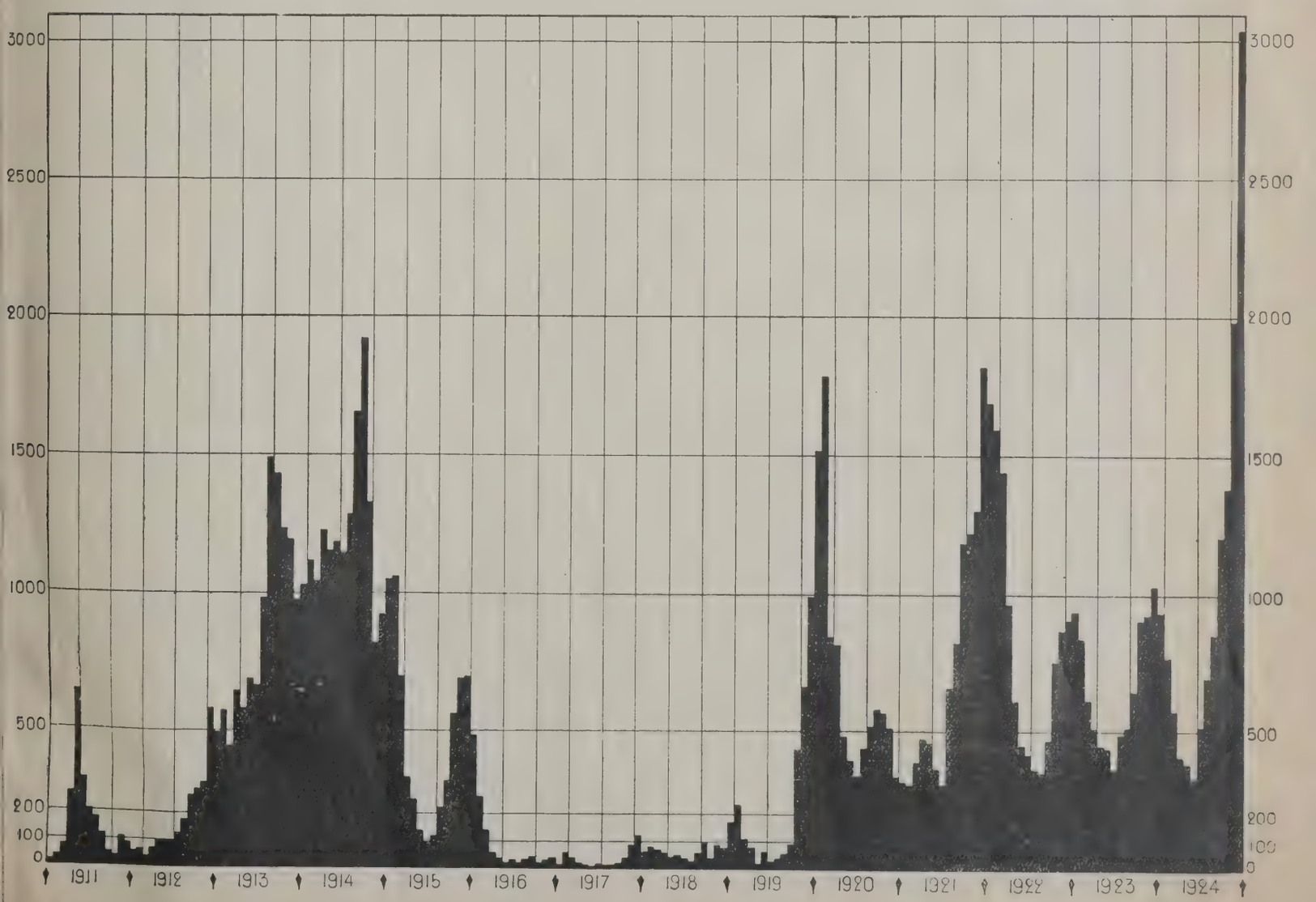
The deaths from plague in Java in 1924 numbered 13,057, a total which has been exceeded only in 1914. The epidemic became increasingly serious toward the end of the year, and 3,031 deaths were reported during the four weeks

December 2nd to 29th — a figure which is more than 50 per cent higher than any monthly total previously recorded. A decline followed in January 1925. The highest incidence was in Surakarta, Kedu and Banjumas, in the southern part of Mid-Java.

Mortality from Plague in the Provinces of Java, 1924.

Plague has never before occurred in Banjumas, the furthest west of these districts, so that a new extension of the infected area has taken place. The first case occurred in this province in June 1924, and a serious outbreak soon followed. The disease has also spread during the last two years into the province of Cheribon in West Java.

Seasonal Movement of Plague Mortality in Java since its Appearance in 1911 until December 1924.



The seasonal maximum usually occurs between November and January; in 1924, it occurred in December, as shown below.

DEATHS FROM PLAGUE IN JAVA DURING 1924 (BY 4-WEEKLY PERIODS).

| *Four weeks ending:* | *Deaths* | *Four weeks ending:* | *Deaths* |
|---|---|---|---|
| January 28th | 926 | *Brought forward* | 3,938 |
| February 25th | 783 | August 11th | 704 |
| March 24th | 573 | September 8th | 844 |
| April 21st | 410 | October 6th | 1,187 |
| May 19th | 384 | November 3rd | 1,369 |
| June 16th | 344 | December 1st | 1,984 |
| July 14th | 518 | December 29th | 3,031 |
| *Carried forward* | 3,938 | TOTAL | 13,057 |

There were 39 deaths from plague in Macassar, on the island of Celebes, of which 29 occurred during the first and 8 during the last quarter of the year. The disease was introduced into this port in 1922. The chief ports of the other islands have been free from plague.

*Hong-Kong.* — No case of plague occurred at Hong-Kong during 1924, a fact which is unique in the last thirty years. Plague was introduced in 1894, after which cases occurred every year. In 1922, 1,181 cases occurred and 148 in 1923.

*French Indo-China.* — Plague was introduced into Indo-China during the early years of the present pandemic, but no epidemics comparable to those which have ravaged India have ever occurred. Fewer cases of plague were reported in 1924 than during the preceding three years. There were 66 cases in Annam as against 111 in 1923, 35 in Cochin-China as against 85, and 111 in Cambodia as against 798 in 1923. A higher prevalence was reported in Tonking and Kwangchow Wan than during previous years — 635 cases occurring, mostly from April to June. Laos was, as usual, free from plague.

*Siam.* — 93 cases of plague occurred in Siam in 1924 as against 167 in 1923; of these cases, 47 were in the province of Bangkok and the remainder scattered over five other provinces.

*Siberia and the Far Eastern Republic.* — Two fatal cases of plague occurred in July in the Transbaikal Government and 3 fatal cases in October in the Buriat-Mongol Republic.

*Straits Settlements.* — Fewer cases of plague occurred here than during any one of the preceding four years. Eighteen cases, of which 17 were fatal, were reported in Singapore and 1 (fatal) case in Penang during 1924. No cases occurred in the other settlements.

## EUROPE.

*Bulgaria.* — Two cases of plague were discovered in February on a steamer in the port of Varna.

*Dodecanese.* — Twelve cases and two deaths were reported on the island of Simi.

*France.* — There were 4 cases of plague at St. Ouen, a suburb of Paris, where 14 cases had been reported in 1923 and 3 in 1922.

*Greece.* — There were 69 cases and 16 deaths officially reported during 1924, as against 41 in 1923 and 50 in 1922. Numerous localities on the mainland as well as on the islands became infected during the year, but the geographical distribution of all cases is not given in the official report. The type is stated to have been relatively benign, the case fatality being only 23.2 per cent. The ports of Piræus and Patras were both plague-infected.

*Italy.* — Three cases of plague were reported in the province of Naples on September 15th, of which 2 (1 fatal) occurred among dock labourers in the port of Naples and 1 at Portici.

*Portugal.* — Three cases, 1 fatal, occurred at Lisbon during 1924 as against 15 in 1923 and 21 in 1922. Twenty-five cases were reported in the island of St. Michael and 10 (pneumonic) cases on the island of Terceira, both in the Azores. This is an improvement on the previous year, when about 200 cases were reported in these islands.

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## CHOLERA

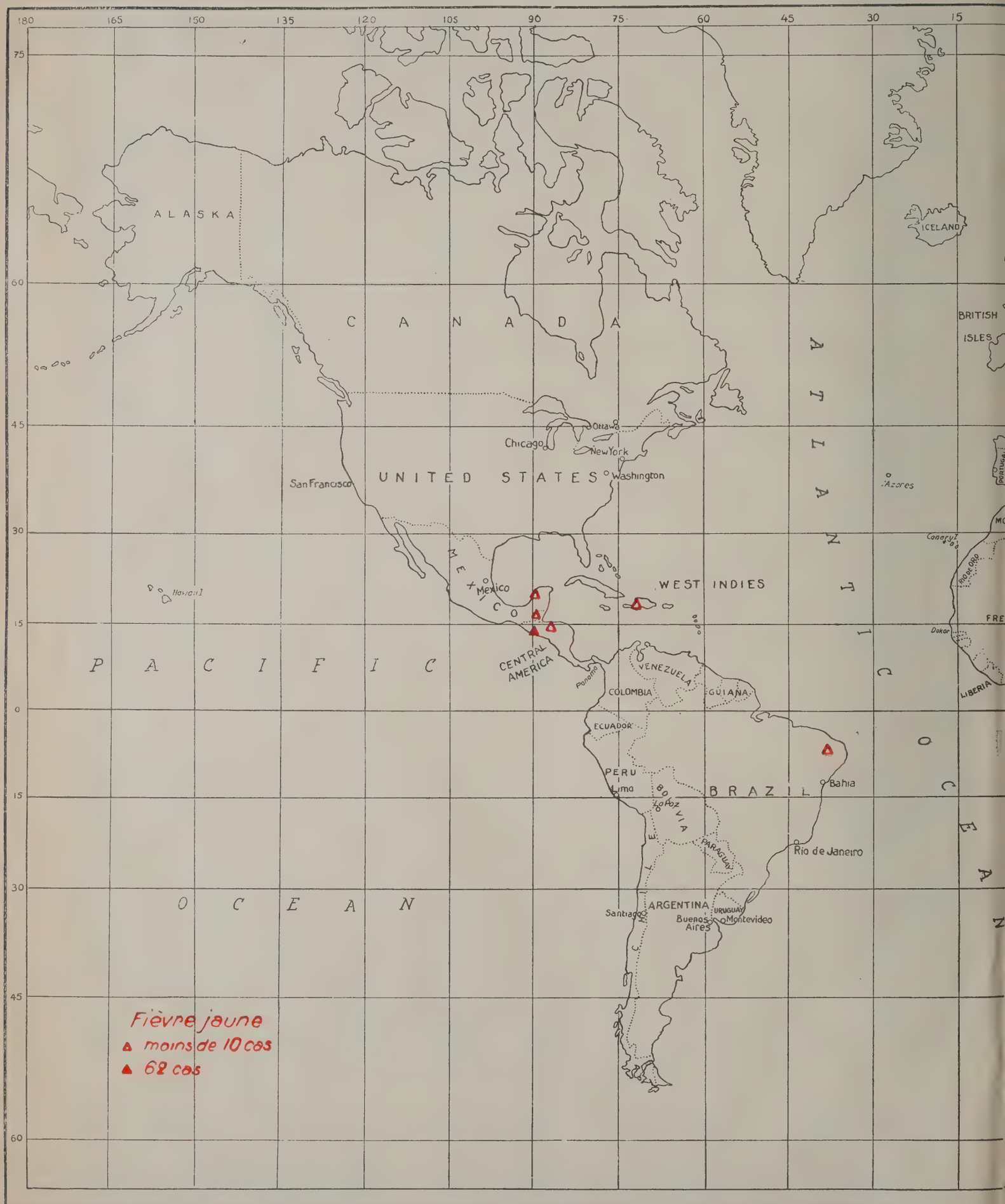
Cholera was more prevalent in India during 1924 than during the two preceding years, but outside this country it was rare. In Russia it was practically non-existent. The following table summarises the information received regarding the prevalence of this disease throughout the world during 1924. It will be seen that cholera has been entirely confined to Asia, with the exception of nine cases in European Russia.

**Asia**

| Country | 1922 Cases | 1922 Deaths | 1923 Cases | 1923 Deaths | 1924 Cases | 1924 Deaths |
|---|---|---|---|---|---|---|
| *Ceylon* | — | — | — | 8 | 17 | 14 |
| *China:* | | | | | | |
| Shanghai | 331 | 84 | — | 67 | 1 | 1 |
| Canton | 258 | 58 | 1 | — | — | — |
| Amoy | — | — | — | — | — | 1 |
| *Hong-Kong* | 1 | 0 | 1 | 1 | 0 | 0 |
| *British India* | — | 121,739 | — | 72,695 | — | 276,567 |
| Bengal | — | 51,712 | — | 41,483 | — | 41,899 |
| Delhi | — | 6 | — | 10 | — | 121 |
| Bihar and Orissa | — | 26,805 | — | 8,130 | — | 75,037 |
| Assam | — | 16,219 | — | 3,825 | — | 15,653 |
| United Provinces | — | 2,330 | — | 2,595 | — | 66,131 |
| Punjab | — | 128 | — | 0 | — | 3,261 |
| N.-W. Frontier Province | — | 92 | — | 0 | — | 0 |
| Central Provinces | — | 64 | — | 1,090 | — | 10,139 |
| Madras Presidency | — | 16,502 | — | 4,929 | — | 44,477 |
| Bombay Presidency | — | 2,768 | — | 8,735 | — | 8,660 |
| Burma | — | 5,047 | — | 1,825 | — | 2,538 |
| Indian States and Agencies | — | 66 | — | 73 | — | 8,651 |
| *French India:* | | | | | | |
| Pondicherry | — | — | — | — | 181 | 168 |
| Arioncoupon | — | — | — | — | 5 | 5 |
| Karikal | — | — | — | — | 7 | 6 |
| Chandernagore | — | — | — | — | 22 | 15 |
| Mahé | — | — | — | — | 2 | 0 |
| *Indo-China* | 1,737 | 970 | 310 | 154 | 180 | 73 |
| Annam | 255 | 124 | 43 | 17 | 16 | 2 |
| Cochin-China | 984 | 632 | 199 | 112 | 55 | 28 |
| Cambodia | 382 | 221 | 40 | 10 | 49 | 28 |
| Tonking and Kwangchow Wan | 27 | 2 | 39 | 4 | 60 | 15 |
| Laos | 89 | 15 | 4 | — | 0 | 0 |
| *Iraq* | 0 | — | 1,503 | 1,098 | 0 | 0 |
| *Japan* | 743 | 427 | 4 | 2 | 0 | 0 |
| *Java* | 28 | — | 0 | 0 | 0 | 0 |
| *Korea* | 40 | 23 | — | — | 294* | 120* |
| *Kwantung* | — | — | — | — | 4 | — |
| *Malay States:* | | | | | | |
| Federated | 0 | 0 | 0 | 0 | 21 | 12 |
| Unfederated: | | | | | | |
| Kelantan | — | — | 29 | 24 | 1 | 0 |
| *Persia:* | | | | | | |
| Mohammerah | 7 | 2 | 55 | 27 | 0 | 0 |
| Assara | 21 | 0 | — | — | 0 | 0 |
| Abadan | — | — | — | 992 | 1 | 1 |
| Ahwaj | — | — | — | 2 | 0 | 0 |
| Ahouaz | — | — | 11 | 8 | 0 | 0 |
| Bouchir | — | — | — | — | 1 | 1 |
| *Philippine Islands* | 165 | 72 | 28 | 15 | 31 | 22 |
| Manila | — | 24 | 1 | 1 | 9 | 4 |
| Provinces | — | 48 | 27 | 14 | 22 | 18 |
| *Asiatic Russia:* | | | | | | |
| Transcaucasia | 675 | — | 0 | 0 | 1 | 0 |
| Kirghiz Republic | 8,935 | — | 5 | — | 0 | 0 |
| Turkestan | 2,522 | — | 5 | — | 0 | 0 |
| Siberia | 9,308 | — | 2 | — | 0 | 0 |
| *Siam* | — | — | 170 | 82 | 97 | 61 |
| *Straits Settlements* | 3 | 2 | 0 | 0 | 12 | 9 |

* For seven months only.

CASES OF CHOLERA AND YELLOW FEVER NOTIFIED IN 1924.



## Cases of Cholera and Yellow Fever notified in 1924.

**Europe.**

| Country | 1922 Cases | 1922 Deaths | 1923 Cases | 1923 Deaths | 1924 Cases | 1924 Deaths |
|---|---|---|---|---|---|---|
| *Poland* | 121 | 34 | 0 | 0 | 0 | 0 |
| *European Russia* | 20,312 | — | 91 | — | 8 | — |
| *Ukraine* | 41,903 | — | 11 | — | 0 | 0 |

British India.

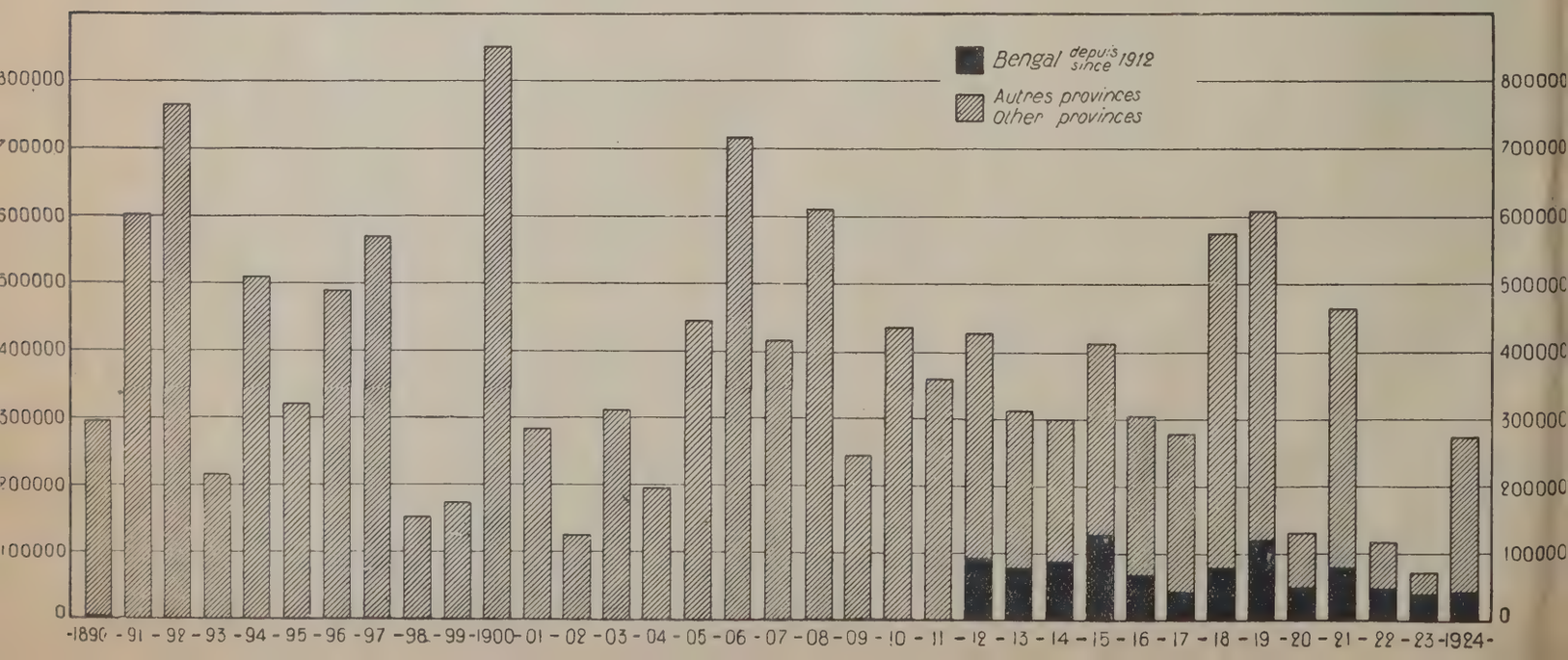
The year 1924 witnessed a renewed activity of cholera in India, after two years of relative quiescence. The mortality attributed to cholera each year since the great epidemic of 1900 — which is considered by some writers as the beginning of a new pandemic period — is shown in the table below. It may be added that 1900 cannot be considered as a turning point in the history of cholera in India, as commonly believed, in the same sense that 1898 was for plague; cholera was, as a matter of fact, quite as prevalent before that year as after it.

Deaths from Cholera in India, 1900-1924.

| Year | Deaths | Year | Deaths |
|---|---|---|---|
| 1900 | 850,985 | 1913 | 311,127 |
| 1901 | 282,649 | 1914 | 299,174 |
| 1902 | 125,885 | 1915 | 409,498 |
| 1903 | 314,299 | 1916 | 300,208 |
| 1904 | 193,457 | 1917 | 277,537 |
| 1905 | 442,508 | 1918 | 571,643 |
| 1906 | 713,664 | 1919 | 602,304 |
| 1907 | 413,180 | 1920 | 131,203 |
| 1908 | 607,278 | 1921 | 459,843 |
| 1909 | 242,848 | 1922 | 121,739 |
| 1910 | 435,077 | 1923 | 72,695 |
| 1911 | 356,157 | 1924 | 276,567 |
| 1912 | 425,192 | | |

The inc dence of cholera in 1923 reached the lowest level recorded during the last thirty years, and during the last weeks of that year very few cases were reported outside Bengal. For about two months no single case was reported in an area comprising about half India and including the Punjab, the North-Western Frontier Province, Delhi, United Provinces, Central Provinces, Hyderabad and Mysore. An increased prevalence of cholera in the Bengal and Madras Presidencies was shown in the returns for February and March, and the disease began to spread in Assam and Burma.

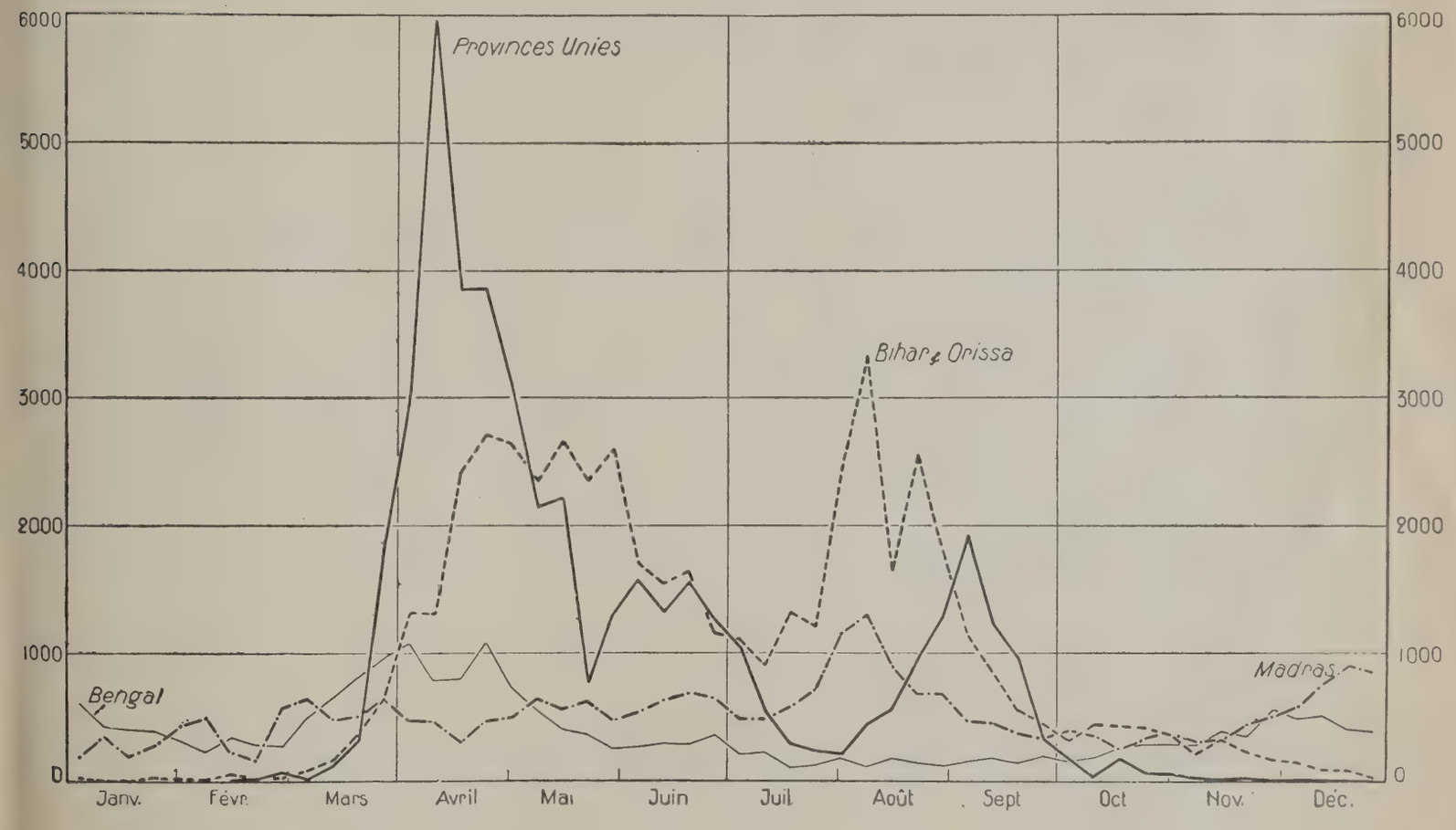
Deaths from Cholera in Bengal and Other Provinces of British India from 1890 to 1924.



The first cases of cholera observed in 1924 in the United Provinces occurred in February, and a violent epidemic broke out there at the end of March, the number of reported cases increasing from 397 to 3,295 from one week to the next. The epidemic culminated with 8,075 cases reported for the week ended April 12th. Outbreaks of lesser gravity followed at the end of June and the beginning of September, after which the incidence declined rapidly until for the last four weeks of the year only two fresh cases vere reported in this province.

In Bihar and Orissa there were two distinct periods of very high cholera prevalence during 1924, the first maximum occurring at the end of April, the second in August. There was only one serious outbreak in the Central Provinces, the maximum occurring about September 1st. The disease spread into the Punjab in July, but only a few thousand cases occurred. The North-Western Frontier Province and Mysore remained practically free from cholera.

Deaths from Cholera in certain Provinces of British India by Weeks during 1924.




The general geographical configuration of the epidemic of 1924 resembled that of 1921, in that its chief centre was clearly the Ganges Valley; but its total prevalence was lower than that of the former epidemic. The Middle and Upper Ganges Valley and Assam had the highest mortality. Although the death rate from cholera in Bengal was 9 per 10,000 inhabitants, the year must be considered as favourable for the Presidency in view of its extremely bad records during preceding years. The number of deaths from cholera during 1924 was about equal to that reported in 1923, no lower figures having been recorded for the last thirty-five years. It is an interesting fact that Bengal, no district of which is hardly ever free from cholera, has been less and less affected by the later great epidemic outbreaks in India. On the other hand, when cholera prevalence is low elsewhere, the disease centres distinctly in Bengal — as in 1923, when 57 per cent of all the cholera deaths reported in India occurred there. It would appear that this disease is more essentially endemic in Bengal than in other parts of India, and it may be that the population of the Presidency has developed a higher degree of immunity than that of the rest of India.

DEATHS FROM CHOLERA IN INDIA, BY PROVINCES, 1914-1924.

| *Provinces* | 1914 | 1915 | 1916 | 1917 | 1918 | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | Rate per 100.000 of 1924 | *Provinces* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| N.-W. Frontier Province | 2,300 | 932 | 194 | 0 | 31 | 4,400 | 2 | 4,285 | 92 | 0 | 0 | 0 | N.-W. Frontier Province |
| Punjab . . | 6,656 | 13,196 | 1,651 | 1,365 | 257 | 8,561 | 138 | 19,215 | 128 | 0 | 3,261 | 15.8 | Punjab |
| Delhi. . . . | 12 | 92 | 69 | 12 | 3 | 66 | 7 | 635 | 6 | 10 | 121 | 27.0 | Delhi |
| United Prov. | 32,498 | 90,508 | 33,300 | 21,440 | 119,746 | 81,365 | 6,952 | 149,667 | 2,330 | 2,595 | 66,131 | 145.0 | United Prov. |
| Bihar and Orissa | 32,115 | 88,349 | 90,582 | 109,620 | 205,584 | 104,727 | 26,341 | 90,688 | 26,805 | 8,130 | 75,037 | 220.7 | Bihar and Orissa |
| Centr. Prov. | 20,345 | 5,662 | 39,205 | 691 | 3,351 | 62,089 | 3,491 | 58,331 | 64 | 1,090 | 10,139 | 72.9 | Centr. Prov. |
| Bombay . . | 17,788 | 380 | 20,702 | 17,025 | 8,841 | 51,610 | 2,048 | 3,556 | 2,768 | 8,735 | 8,660 | 44.8 | Bombay |
| Madras. . . | 68,449 | 30,098 | 16,735 | 58,939 | 122,263 | 93,262 | 31,139 | 27,064 | 16,502 | 4,929 | 44,477 | 105.1 | Madras |
| Bengal . . | 89,224 | 130,679 | 70,836 | 45,021 | 82,739 | 124,949 | 54,199 | 80,547 | 51,712 | 41,483 | 41,899 | 89.7 | Bengal |
| Assam . . . | 9,270 | 26,979 | 13,099 | 10,953 | 14,077 | 33,080 | 2,421 | 12,829 | 16,219 | 3,825 | 15,653 | 195.9 | Assam |
| Burman . . | 2,073 | 17,597 | 1,673 | 1,914 | 4,269 | 13,260 | 3,396 | 3,791 | 5,047 | 1,825 | 2,538 | 19.2 | Burman |
| Other Indian States and Agencies . | 18,453 | 5,029 | 13,023 | 10,569 | 10,849 | 24,994 | 1,070 | 9,270 | 66 | 73 | 8,651 | 12.0 | Other Indian States and Agencies |
| | 299,174 | 409,498 | 300,208 | 277,537 | 571,643 | 602,304 | 131,203 | 459,843 | 121,739 | 72,695 | 276,567 | 86.7 | |

## FAR EAST.

The prevalence of cholera in the Far East has diminished steadily since the epidemic of 1919, and, except in Korea, was lower in 1924 than in any recent year. Only 312 cases were reported during the year in all the further Indies, excluding Burma; 180 cases occurred in *French Indo-China*, 97 in *Siam*, 22 in the *Malay States* and 13 in the *Straits Settlements*. Serious outbreaks occurred in Siam and Indo-China during 1919 and 1,737 cases were reported in the latter country in 1922.

Important outbreaks of cholera have not occurred in the *Philippine Islands* since 1919 and 1920, when 18,414 and 1,387 cases respectively were reported. In 1924 there were only 31 cases, of which 9 occurred in Manila.

No case of cholera was reported in *Java* during 1924. There were epidemics in 1918 and 1919, when 9,864 and 8,861 cases respectively were reported. Since then, only a few sporadic cases have been notified.

The principal ports of *China* were free, or practically so, from cholera during 1924. No case was reported in *Japan*, where small outbreaks had occurred in 1919, 1920 and 1922. There were 294 cases and 120 deaths reported in *Korea* during the first six months of the year. There had been a serious epidemic of cholera in that country in 1919 and in 1920, when 11,084 and 13,568 cases respectively were reported; the disease then practically disappeared, only 1 case being reported in 1921 and 23 in 1922.

## NEAR EAST.

Cholera has not appeared in 1924 in any Asiatic country west of India with the exception of 2 cases in *Persia*. No case was reported during the year in *Iraq*, where it was epidemic in 1923. The disease was entirely absent from *Asiatic Russia* during 1924.

## EUROPE.

Cholera has practically disappeared from *Russia* since the severe epidemics of 1921 and 1922. Only 9 cases were reported in June and July of 1924, namely, 7 in Rostov, 1 in Krasnodar and 1 in the government of Moscow.

## YELLOW FEVER

The information available regarding the occurrence of yellow fever has been summarised in the following tables.

| Country | 1919 | | 1920 | | 1921 | | 1922 | | 1923 | | 1924 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cases | Deaths | Cases | Deaths | Cases | Deaths | Cases | Deaths | Cases | Deaths | Cases | Deaths |
| *Africa:* | | | | | | | | | | | | |
| Dahomey | — | — | — | — | — | — | — | — | 4 | 4 | 9 | 8 |
| French Soudan | — | — | — | — | — | — | 3 | — | — | — | — | — |
| Gold Coast | — | — | — | — | — | — | 6 | 1 | 26 | 18 | 8 | 7 |
| Ivory Coast | — | — | — | — | — | — | 5 | 3 | — | — | — | — |
| Nigeria | — | — | reported | | reported | | 2 | 1 | — | — | 1 | 1 |
| Togoland | — | — | — | — | — | — | 1 | — | 1 | — | — | — |
| *America:* | | | | | | | | | | | | |
| *Brazil* | 63 | 23 | 6 | 2 | 1 | 1 | 6 | 5 | 156 | 51 | 2 | 1 |
| Bahia | 62 | 22 | 5 | 1 | 1 | 1 | 4 | 3 | 151 | 47 | — | — |
| Ceara | — | — | — | — | — | — | — | — | 1 | 1 | — | — |
| Pernambuco | 1 | 1 | 1 | 1 | — | — | 2 | 2 | 3 | 2 | 2 | 1 |
| Rio de Janeiro | — | — | — | — | — | — | — | — | 1 | 1 | — | — |
| *Colombia* | — | 4 | 1 | 1 | — | — | — | — | 39 | 2 | — | — |
| *Dominican Republic* | — | — | — | — | — | — | — | — | — | — | 2 | — |
| *Ecuador* | 149 | 82 | — | — | — | — | — | — | — | — | — | — |
| Guayaquil | 127 | 71 | — | — | — | — | — | — | — | — | — | — |
| Other regions | 22 | 11 | — | — | — | — | — | — | — | — | — | — |
| *Guatemala* | — | — | 11 | 3 | — | — | — | — | — | — | — | — |
| *French Guinea* | — | — | — | — | — | — | — | — | 1 | 1 | — | — |
| *Honduras* | 1 | — | — | — | 17 | 6 | — | — | — | — | 1 | 1 |
| *British Honduras* | — | — | — | — | — | — | — | — | — | — | 3 | 1 |
| *Mexico* | 49 | 21 | 505 | 249 | 174 | 60 | 43 | 25 | 0 | 0 | 1 | 1 |
| Manzanillo | — | — | — | — | 20 | 10 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chihuahua | — | — | — | — | 40 | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| Colima | — | — | — | — | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Jabisco | — | — | — | — | 15 | 7 | 3 | 0 | 0 | 0 | 0 | 0 |
| Sinaloa | — | — | — | — | 15 | 8 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tamanlipas | — | — | — | — | 3 | 2 | 17 | 12 | 0 | 0 | 0 | 0 |
| Nuevo Leon | — | — | — | — | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| Oaxaca | — | — | — | — | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| Vera Cruz | — | — | — | — | 79 | 28 | 21 | 11 | 0 | 0 | 0 | 0 |
| Yucatan | 49 | 21 | — | — | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| *Peru* | 54 | 15 | 228 | — | 293 | 115 | — | — | — | — | — | — |
| Callao | — | — | 1 | — | 1 | — | — | — | — | — | — | — |
| Lambayeque | — | — | — | — | 270 | 103 | — | — | — | — | — | — |
| Libertad | — | — | — | — | 22 | 12 | — | — | — | — | — | — |
| Piura | 54 | 15 | 227 | — | — | — | — | — | — | — | — | — |
| *Salvador* | 8 | 1 | 56 | 20 | — | — | — | — | — | — | 77 | 28 |
| San Salvador | 2 | 1 | 6 | 2 | — | — | — | — | — | — | — | — |
| La Union | 2 | — | — | — | — | — | — | — | — | — | — | — |
| San Miguel | 4 | — | — | — | — | — | — | — | — | — | — | — |
| Sonsonate | — | — | 49 | 17 | — | — | — | — | — | — | — | — |
| Armenia | — | — | 1 | 1 | — | — | — | — | — | — | — | — |

Yellow fever reappeared in 1924 in various parts of Central America. A small epidemic occurred in *Salvador* and there were a few cases in *Nicaragua*, *Honduras*, *British Honduras* and *Yucatan*. In South America, only 2 cases, which occurred in Pernambuco, are definitely established.

Although the disease has become rare on the Guinea Coast also, 18 cases, all told, were reported from the Gold Coast, Dahomey and Nigeria.

## TYPHUS

The incidence of typhus was lower in all its centres throughout the world than during any year since the war, and it would seem that the great pandemic of this disease, which has claimed millions of victims, is definitely terminated. The decline was most marked in Eastern and East-Central Europe, where the disease is most prevalent, but it is noteworthy that the North African, South African and American centres shared in the general decline.

### AFRICA.

Typhus is endemic in many regions of North Africa, from Egypt in the east to Morocco in the west, and also in the Union of South Africa. The fact of its existence in tropical Africa is uncertain; no cases have been reported from such districts as possess information, namely, Uganda, Kenya, Tanganyika, Zanzibar, Mauritius, Northern and Southern Rhodesia, Nyasaland, Nigeria, the Gold Coast and Sierra Leone. Information received from countries where the disease exists is summarised below.

| | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| Algeria | Cases | 649 | 1,078 | 6,360 | 1,233 | 1,666 | 471 |
| Basutoland | Cases | — | — | 503 | 402 | 958 | 500 |
| | Deaths | — | — | 93 | 70 | 120 | 62 |
| Egypt | Cases | 16,986 | 13,253 | 4,487 | 2,489 | 1,935 | 1,683 |
| | Deaths | 5,573 | 3,510 | 1,271 | 723 | 603 | 588 |
| Union of South Africa | Cases | 4,828 | 11,276 | 9,157 | 7,922 | 2,922 | 1,570 |
| | Deaths | 1,122 | 1,791 | 1,140 | 966 | 437 | 257 |
| Tunisia | Cases | — | — | — | — | 357 | 209 |

*Algeria.* — The diminution of typhus incidence in Algeria in 1924 was very marked in all provinces, as shown by the table below. It has practically disappeared from the Southern Territory.

CASES OF TYPHUS REPORTED IN ALGERIA, BY PROVINCES, 1922-1924.

| *Department* : | 1922 | 1923 | 1924 |
|---|---|---|---|
| Algiers | 217 | 329 | 125 |
| Oran | 307 | 102 | 67 |
| Constantine | 336 | 1,047 | 238 |
| Southern Territory | 287 | 161 | 19 |
| Military Force | 76 | 27 | 22 |
| TOTAL | 1,223 | 1,666 | 471 |

*Egypt.* — Typhus cases were reported from nearly all provinces of Egypt, and the very high proportion of deaths to cases reported may indicate that it is even more prevalent than is shown by the statistics. Only one-tenth as many cases occurred in 1924 as in 1919; their distribution was as follows:

TYPHUS CASES AND DEATHS REPORTED IN EGYPT, 1924.

| | *Cases* | *Deaths* | | *Cases* | *Deaths* |
|---|---|---|---|---|---|
| Cairo | 108 | 54 | Frontier Provinces | 9 | 2 |
| Alexandria | 18 | 9 | Provinces of Lower Egypt | 939 | 231 |
| Suez | 2 | 1 | Provinces of Upper Egypt | 584 | 284 |
| Canal Zone | 4 | 0 | | | |

The seasonal maximum falls between March and June, but cases are frequent even during the hottest time of the year.

CASES OF TYPHUS REPORTED IN EGYPT BY FOUR-WEEKLY PERIODS, 1923-1924.

| *4 weeks ending:* | 1923 | 1924 | *4 weeks ending:* | 1923 | 1924 |
|---|---|---|---|---|---|
| January 29th | 93 | 80 | Brought forward | 1,594 | 1,230 |
| February 26th | 130 | 60 | August 12th | 76 | 99 |
| March 25th | 283 | 151 | September 9th | 57 | 134 |
| April 22nd | 267 | 276 | October 7th | 36 | 60 |
| May 20th | 307 | 283 | November 4th | 37 | 44 |
| June 17th | 323 | 247 | December 2nd | 58 | 47 |
| July 15th | 191 | 133 | December 31st | 77 | 69 |
| Carried forward | 1,594 | 1,230 | TOTAL | 1,935 | 1,683 |

*Union of South Africa.* — The incidence of typhus has diminished steadily since 1920, when 11,276 cases were reported. The 1,570 cases reported in 1924 were distributed throughout the four provinces of the Union. The case-fatality rate was markedly higher among natives than among Europeans and the disease much more prevalent among the former.

Typhus Cases and Deaths reported in the Union of South Africa (by Provinces and Race) during 1923 and 1924.

| *Province* | 1923 | | | | | | 1924 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Europeans* | | *Natives* | | *Total* | | *Europeans* | | *Natives* | | *Total* | |
| | *Cases* | *Deaths* | *Cases* | *Deaths* | *Cases* | *Deaths* | *Cases* | *Deaths* | *Cases* | *Deaths* | *Cases* | *Deaths* |
| Cape . . . . . | 38 | 3 | 2,132 | 303 | 2,170 | 306 | 22 | 1 | 799 | 104 | 821 | 105 |
| Natal . . . . . | 2 | 0 | 190 | 34 | 192 | 34 | 8 | 0 | 259 | 70 | 267 | 70 |
| Orange Free State . . | 11 | 0 | 388 | 62 | 399 | 62 | 5 | 0 | 253 | 43 | 258 | 43 |
| Transvaal . . . . . | 7 | 1 | 154 | 34 | 161 | 35 | 5 | 0 | 219 | 39 | 224 | 39 |
| Total . . . | 58 | 4 | 2,864 | 433 | 2,922 | 437 | 40 | 1 | 1,530 | 256 | 1,570 | 257 |
| Case Fatality . . . . | 6.8 % | | 15.1 % | | 14.9 % | | 2.5 % | | 16.7 % | | 16.4 % | |

The seasonal fluctuations of typhus incidence resemble those in countries of the northern hemisphere, and the annual minimum usually occurs between May and September, although this is the summer season.

Typhus Cases and Deaths in the Union of South Africa, by Months, 1923 and 1924.

| *Month* | 1923 | | 1924 | |
|---|---|---|---|---|
| | *Cases* | *Deaths* | *Cases* | *Deaths* |
| January . . . . . | 597 | 66 | 199 | 25 |
| February . . . . . | 453 | 27 | 215 | 50 |
| March. . . . . | 203 | 18 | 121 | 13 |
| April . . . . . | 134 | 16 | 136 | 13 |
| May . . . . . | 108 | 21 | 87 | 9 |
| June . . . . . | 137 | 27 | 74 | 10 |
| July . . . . . | 133 | 24 | 101 | 19 |
| Carried forward . | 1,765 | 199 | 933 | 139 |

| *Month* | 1923 | | 1924 | |
|---|---|---|---|---|
| | *Cases* | *Deaths* | *Cases* | *Deaths* |
| Brought forward . | 1,765 | 199 | 933 | 139 |
| August . . . . | 95 | 22 | 111 | 12 |
| September . . . | 321 | 95 | 110 | 5 |
| October . . . . . | 289 | 58 | 69 | 14 |
| November. . . . | 273 | 25 | 233 | 66 |
| December . . . | 179 | 38 | 114 | 21 |
| Total . | 2,922 | 437 | 1,570 | 257 |

Typhus is endemic also in the neighbouring country of Basutoland, where 500 cases were reported in 1924 as against 955 during the previous year.

## AMERICA.

Typhus is endemic in Mexico and in certain regions of South America, but reliable information is not available from all the countries.

Typhus has been introduced into the *United States*, but is of rare occurrence; 119 cases were reported in 1924, of which 69 were in the State of Texas.

No case of typhus was reported in *Canada*, *West Indies*, *Panama*, *British Guiana*, *Uruguay*, or in the cities of *Brazil*, *Argentine* and *Peru* for which information has been received. The disease is prevalent in *Chile*, but its incidence has diminished since 1919, as shown in the table below.

Typhus Cases and Deaths reported in Chile, 1919 to 1924.

| | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 (*Jan.-June*) |
|---|---|---|---|---|---|---|
| Cases . . . . . | 14,517 | 7,138 | 4,503 | 4,469 | 3,294 | 1,340 |
| Deaths . . . . . | 2,804 | 1,182 | 569 | 903 | 642 | 186 |

## ASIA.

Typhus does not seem to be very prevalent in Asia, except in Asiatic Russia. The information available is summarised below.

| | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| Hong-Kong | Cases | 0 | 3 | 0 | 0 | 1 | 0 |
| | Deaths | 0 | 1 | 0 | 0 | 0 | 0 |
| Iraq | Cases | — | — | 61 | 48 | 20 | 9 |
| Japan | Cases | 225 | 66 | 171 | 23 | 14 | 15 |
| | Deaths | 30 | 3 | 22 | 7 | 3 | 2 |
| Korea | Cases | — | 78 | 73 | 63 | 27 | 539 |
| | Deaths | — | 20 | 18 | 20 | 4 | 94 |
| Malay States, Federated | Cases | — | — | 0 | 0 | 0 | 10 |
| | Deaths | — | — | 0 | 0 | 0 | 1 |
| Kelantan | Cases | — | — | — | — | 2 | 0 |
| | Deaths | — | — | — | — | 2 | 0 |
| Palestine | Cases | — | — | 63 | 33 | 35 | 38 |
| Asiatic Russia (cases): | | | | | | | |
| Far Eastern Republic | | — | — | — | — | 1,775 | 759 |
| Kirghiz Republic | | 18,139 | 26,598 | 4,326 | 23,087 | 1,512 | 874 |
| Siberia | | — | 347,574 | 34,241 | 68,481 | 24,349 | 8,939 |
| Turkestan | | — | — | 9,775 | 16,884 | 1,249 | 747 |
| Transcaucasia | | — | — | — | 12,376 | 2,663 | 1,070 |

Typhus has continued to decline in Asiatic Russia and does not now appear to be more prevalent than before the war. Its prevalence remains higher in *Siberia* than in *Central Asia*. An outbreak occurred in *Korea*, where the disease had been less frequent in former years.

## AUSTRALASIA.

Typhus is not endemic in this part of the world. Two cases notified in *Australia* are the only ones on record for the last five years.

## EUROPE.

Typhus cases reported in European countries during the last six years are shown in the table below.

| *Countries* | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|
| Austria | 996 | 86 | 81 | 23 | 3 | 0 |
| Bulgaria | 5,671 | 2,885 | 874 | 488 | 413 | 197 |
| Czechoslovakia | 2,457 | 3,019 | 970 | 321 | 366 | 44 |
| Esthonia | 1,232 | 4,125 | 356 | 247 | 63 | 43 |
| Finland | 124 | 1 | 33 | 1 | 11 | 0 |
| Germany | 3,549 | 483 | 533 | 386 | 27 | 8 |
| Greece | — | — | — | — | 7,607 | 266 |
| Hungary | — | — | 73 | 17 | 385 | 229 |
| Italy | 6,051* | 113 | 60 | 0 | 2 | 2 |
| Kingdom of the Serbs, Croats and Slovenes. | — | 1,582 | 1,054 | 232 | 351 | 319 |
| Latvia | — | 4,631 | 1,288 | 1,480 | 430 | 290 |
| Lithuania | — | 5,302 | 3,004 | 3,409 | 830 | 618 |
| Poland | 219,088 | 168,097 | 49,547 | 42,724 | 11,185 | 7,706 |
| Roumania | 56,242 | 46,206 | 8,189 | 3,902 | 5,173 | 3,194 |
| European Russia (without Ukraine) | 2,322,552 | 2,979,560 | 539,216 | 975,762 | 169,508 | 89,086 |
| Ukraine | — | 591,842 | 110,891 | 344,843 | 31,307 | 12,802** |
| Spain | 228*a* | 155*a* | 73*a* | 80*a* | 68*a* | 32*a* |

* Largely among prisoners of war.
** December missing.
*a* Deaths only.

*Russia.* — Approximately half as many typhus cases as in 1923 were reported in Russia during 1924, and it would seem that the great pandemic has come to an end. During 1924, 101,311 cases were reported in European Russia as against 200,815 in 1923, 1,320,605 in 1922 and about 3,000,000 in 1920. The number of cases reported each year during the fifteen years preceding the war varied between 50,000 and 180,000.

The decline was most accentuated in Eastern Russia, especially in the Ural and Viatka-Vietluga districts, where the epidemic had previously been the most severe; in the northern and western districts the decline was, on the contrary, slight and in some governments there was an increase. The geographical divisions shown below are those now adopted by the Russian health service.

Typhus Cases reported in Russia, by Geographical Divisions, 1923 and 1924.

| *Geographical Divisions* | *Population* | 1923 | 1924 | *Rate per* 100,000 *inhabitants in* 1924 |
|---|---|---|---|---|
| North-Eastern | 2,252,552 | 6,101 | 4,349 | 193 |
| North-Western | 5,320,270 | 6,084 | 7,448 | 140 |
| Western | 8,700,339 | 10,569 | 10,723 | 123 |
| Central Industrial | 17,982,853 | 34,454 | 27,153 | 150 |
| Central Black Earth | 10,457,676 | 15,659 | 7,835 | 75 |
| Middle Volga | 9,612,213 | 22,319 | 10,580 | 110 |
| Viatka-Vietluga | 3,317,984 | 22,181 | 4,831 | 146 |
| Ural | 8,030,577 | 39,588 | 8,798 | 109 |
| Lower Volga | 5,126,224 | 6,881 | 5,540 | 108 |
| South-Eastern | 8,119,062 | 5,672 | 1,829 | 22 |
| *Total for European Russia* (without Ukraine) | 78,919,750 | 169,508 | 89,086 | 113 |
| Ukraine | 27,628,381 | 31,307 | 12,802* | 46* |
| Transcaucasia | 5,674,603 | 2,663 | 1,070 | 19 |
| Siberia | 8,105,606 | 24,349 | 8,939 | 110 |
| Far Eastern Republic | 1,810,112 | 1,775 | 759 | 42 |
| Kirghiz Republic | 4,475,061 | 1,512 | 874** | 20** |
| Turkestan Republic | 7,077,722 | 1,249 | 747** | 11** |
| Railways, Waterways, Prisons | — | 10,527 | 2,200 | — |
| *Total for all Russia* | 134,853,752 | 242,890 | 116,477 | 86 |

* Data for eleven months only.
** Data for nine months only.

The highest monthly number of cases was reported in March and the lowest in October and November. A fresh increase took place in December, which, however, represented the normal rise to be expected at this season.

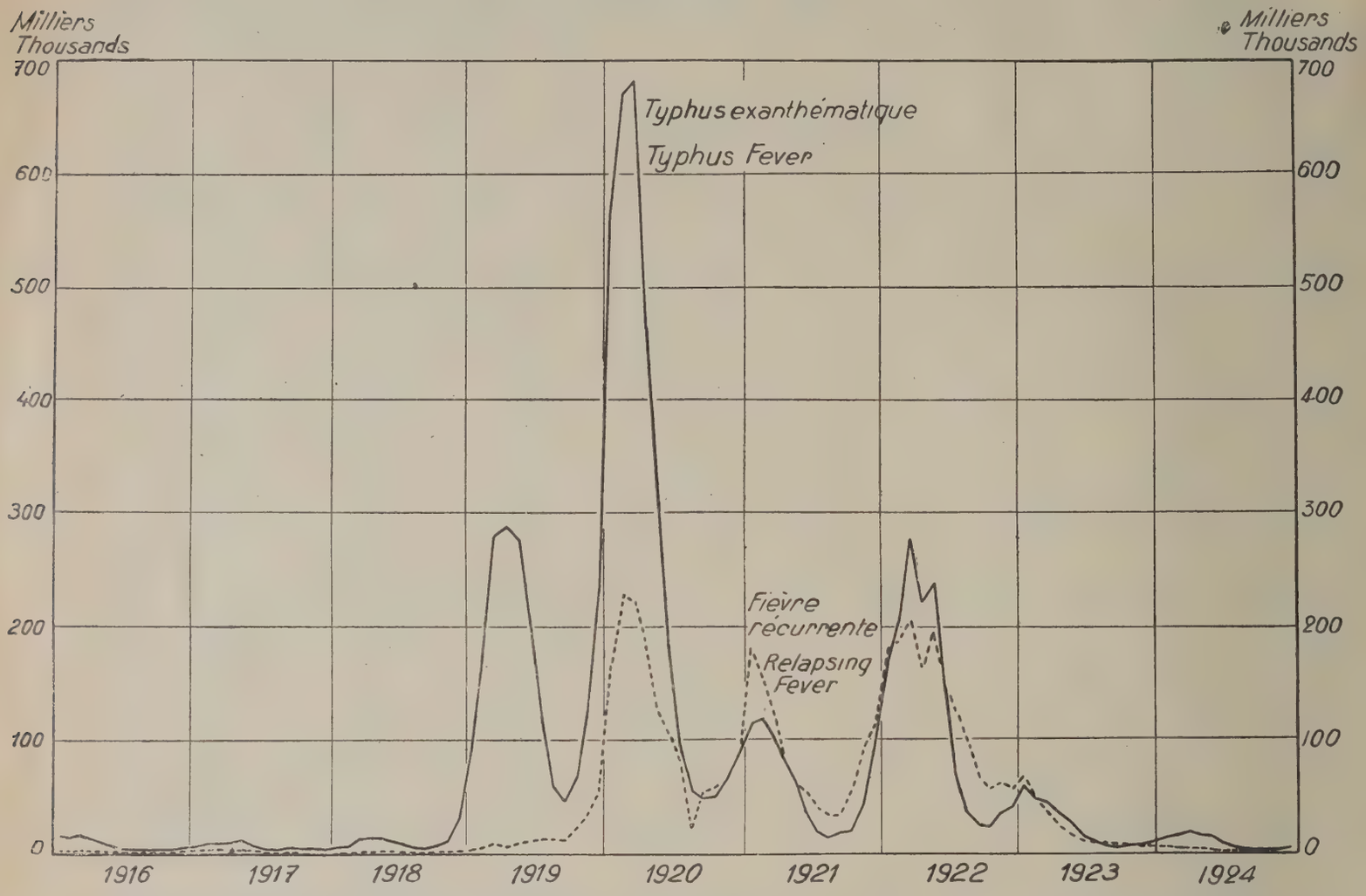
Typhus Cases notified in Russia (Whole Federation), by Months, 1920-1924.*

| *Month* | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|
| January | 563,180 | 113,580 | 165,091 | 56,123 | 15,675 |
| February | 671,267 | 116,113 | 208,768 | 46,157 | 18,950 |
| March | 681,527 | 101,343 | 273,141 | 41,156 | 20,240 |
| April | 463,840 | 85,232 | 220,043 | 30,598 | 17,210 |
| May | 314,453 | 62,179 | 237,441 | 25,445 | 15,457 |
| June | 184,146 | 35,615 | 139,342 | 11,801 | 8,150 |
| July | 95,290 | 18,725 | 66,237 | 6,268 | 4,570 |
| August | 52,563 | 13,048 | 31,685 | 4,686 | 2,931 |
| September | 45,384 | 17,036 | 22,648 | 3,517 | 2,347 |
| October | 45,660 | 19,925 | 21,700 | 4,288 | 2,164 |
| November | 61,448 | 44,326 | 34,375 | 4,969 | 2,234 |
| December | 83,666 | 86,005 | 38,232 | 7,882 | 4,227 |

*Baltic Republics.* — The incidence of typhus continued to decrease in these countries during 1924. The disease was most frequent in *Lithuania*, where 618 cases were reported; in *Latvia*, there were 290 cases, in *Esthonia* 43, and in *Finland* none.

* Provisional figures.

Cases of Typhus and Relapsing Fever reported in Russia (Whole Federation), by Months, 1916-1924.




*Poland.* — The number of typhus cases fell from 11,118 in 1923 to 7,685 in 1924. The disease remained most prevalent in the eastern districts. The case-fatality rate was 7.3 per cent in 1922, 8 in 1923 and 8.5 in 1924. A marked difference in the severity of the cases appears to exist between Eastern Galicia (Tarnopol, Lwow and Stanislawow), where the case fatality was 13.9 per cent, and the other districts of Eastern Poland (Vilna, Bielostock, Novogrodek, Polesia and Volhynia), where it was only 4.1 per cent. In the rest of Poland, the reported case fatality was 8.7 per cent during 1924.

Typhus Cases reported in Poland, by Provinces, 1922-1924.

| | | 1922 | | 1923 | | 1924 | |
|---|---|---|---|---|---|---|---|
| *Province* | *Population* | *Cases* | *Deaths* | *Cases* | *Deaths* | *Cases* | *Deaths* |
| *Eastern Zone:* | | | | | | | |
| Balystock | 1,303,437 | 6,364 | 570 | 719 | 56 | 554 | 27 |
| Nowogrodek | 822,106 | 6,854 | 233 | 871 | 14 | 385 | 11 |
| Polesia | 879,925 | 5,853 | 236 | 531 | 21 | 318 | 11 |
| Volhynia | 1,437,907 | 4,620 | 285 | 370 | 18 | 546 | 22 |
| Tarnopol | 1,428,520 | 1,014 | 151 | 698 | 76 | 670 | 124 |
| Vilna | 983,659 | 639 | 27 | 1,574 | 62 | 1,071 | 46 |
| Total | 6,855,554 | 25,343 | 1,502 | 4,763 | 247 | 3,544 | 241 |
| *East Central Zone:* | | | | | | | |
| Warsaw (City) | 936,046 | 1,014 | 139 | 143 | 18 | 138 | 11 |
| „ (District) | 2,112,406 | 1,240 | 80 | 578 | 50 | 479 | 61 |
| Lublin | 2,087,907 | 6,753 | 453 | 1,189 | 72 | 844 | 49 |
| Lwow | 2,717,986 | 1,938 | 263 | 1,560 | 187 | 987 | 117 |
| Stanislawow | 1,348,580 | 1,606 | 236 | 1,146 | 161 | 650 | 81 |
| Total | 9,202,926 | 12,551 | 1,171 | 4,616 | 489 | 3,098 | 319 |

TYPHUS CASES REPORTED IN POLAND, BY PROVINCES, 1922-1924 *(continued)*.

| *Province* | *Population* | 1922 *Cases* | 1922 *Deaths* | 1923 *Cases* | 1923 *Deaths* | 1924 *Cases* | 1924 *Deaths* |
|---|---|---|---|---|---|---|---|
| *West Central Zone:* | | | | | | | |
| Lodz | 2,250,534 | 845 | 61 | 329 | 28 | 176 | 24 |
| Kielce | 2,535,730 | 1,385 | 146 | 916 | 69 | 608 | 48 |
| Cracow | 1,990,399 | 574 | 84 | 459 | 57 | 150 | 18 |
| TOTAL | 6,776,663 | 2,804 | 291 | 1,704 | 154 | 934 | 90 |
| *Western Zone:* | | | | | | | |
| Pomerania | 939,495 | 46 | 5 | 21 | 2 | 99 | 6 |
| Posen | 1,974,057 | 40 | 4 | 9 | 0 | 8 | 1 |
| Silesia | 1,125,528 | 4 | 1 | 5 | 1 | 2 | 1 |
| TOTAL | 4,039,080 | 90 | 10 | 35 | 3 | 109 | 8 |
| GRAND TOTAL | 26,874,222 | 40,789 | 2,974 | 11,118 | 893 | 7,685 | 658 |

The seasonal distribution of typhus incidence is shown below; the maximum occurred in March and the minimum in October, as in 1923.

TYPHUS CASES REPORTED IN POLAND, BY FOUR-WEEK PERIODS, 1922-1924.
(Revised figures)

| *Four weeks ending:* | 1922 | 1923 | 1924 |
|---|---|---|---|
| January 26th | 4,040 | 1,412 | 721 |
| February 23rd | 5,524 | 1,700 | 1,016 |
| March 22nd | 6,770 | 1,902 | 1,302 |
| April 19th | 7,009 | 1,675 | 1,265 |
| May 17th | 5,460 | 1,438 | 1,153 |
| June 14th | 3,300 | 884 | 655 |
| July 12 h | 2,326 | 575 | 364 |
| August 9th | 1,266 | 286 | 247 |
| September 6th | 738 | 217 | 150 |
| October 4th | 693 | 197 | 160 |
| November 1st | 968 | 124 | 109 |
| November 29th | 1,512 | 298 | 176 |
| December 31st | 3,600 | 447 | 388 |
| TOTAL | 43,206 | 11,185 | 7,706 |

*Roumania.* — Fewer typhus cases were reported in 1924 than in 1923, and fewer cases occurred during the last months of the year than during the corresponding months of preceding years.

TYPHUS CASES REPORTED IN ROUMANIA, BY MONTHS, 1922-1924.
(Provisional figures)

| *Month* | 1922 | 1923 | 1924 |
|---|---|---|---|
| January | 373 | 788 | 357 |
| February | 313 | 945 | 588 |
| March | 421 | 891 | 612 |
| April | 691 | 880 | 622 |
| May | 814 | 697 | 535 |
| June | 346 | 273 | 192 |
| July | 127 | 157 | 69 |
| August | 58 | 83 | 20 |
| September | 49 | 54 | 15 |
| October | 75 | 60 | 38 |
| November | 146 | 129 | 51 |
| December | 358 | 216 | 95 |
| TOTAL | 3,771 | 5,173 | 3,194 |

*Other European Countries.* — Typhus is now relatively rare in other European countries. There were 44 cases in *Czechoslovakia* during 1924, of which 35 were in Sub-Carpathian Ruthenia, as compared with 366 in 1923. In *Germany*, there were only 8 cases and in *Austria* none during 1924.

In *Hungary*, 229 cases were reported during 1924, the majority occurring in districts between the Danube and the Tisza. The Hungarian health service informs us that the first cases occurred among the gipsies in those districts and that the disease was of a more benign type among them than among the remainder of the population.

The number of typhus cases reported in *Bulgaria* during 1924 was 197 as against 413 the previous year. The case fatality was 13.9 per cent in 1922, 12.3 in 1923, and 14.2 in 1924.

A small endemic centre seems to persist in *Bosnia*, while only a few cases are reported elsewhere in the *Kingdom of the Serbs, Croats and Slovenes*.

Typhus Cases reported in the Kingdom of the Serbs, Croats and Slovenes, by Provinces, 1922–1924.

| | 1922 | | 1923 | | 1924 | |
|---|---|---|---|---|---|---|
| | *Cases* | *Deaths* | *Cases* | *Deaths* | *Cases* | *Deaths* |
| Serbia | 45 | 3 | 63 | 7 | 45 | 4 |
| Croatia-Slavonia | 49 | 3 | 10 | 2 | 4 | 0 |
| Slovenia | 0 | 0 | 0 | 0 | 0 | 0 |
| Bosnia and Herzegovina | 128 | 18 | 238 | 33 | 217 | 16 |
| Dalmatia | 0 | 0 | 7 | 2 | 3 | 0 |
| Montenegro | 9 | 2 | 16 | 1 | 15 | 0 |
| Voivodina | 1 | 0 | 17 | 4 | 28 | 1 |
| Total | 232 | 26 | 351 | 49 | 312 | 21 |

The typhus epidemic which occurred in *Greece* in 1923 has terminated, and only 266 cases and 26 deaths were reported during 1924, as against 7,607 cases during the previous year.

## RELAPSING FEVER

The incidence of relapsing fever diminished rapidly in Eastern Europe during 1924. Cases were rare elsewhere, except in Nigeria, where a serious epidemic was reported.

### AFRICA.

The following is the information available on the prevalence of relapsing fever in Africa during recent years.

| *Country.* | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| Algeria | Cases | — | 2 | 18 | 5 | 4 | 1 |
| Egypt | Cases | 3,221 | 2,898 | 1,208 | 172 | 39 | 5 |
| | Deaths | 591 | 429 | 197 | 35 | 6 | 0 |
| Gold Coast | Cases | — | — | — | — | 160 | 16 |
| | Deaths | — | — | — | — | 3 | 2 |
| Nigeria | Cases | 0 | 0 | 0 | 0 | 43 | 253 |
| | Deaths | 0 | 0 | 0 | 0 | 15 | 24* |
| Northern Rhodesia | Cases | — | — | — | — | 42 | 36 |
| | Deaths | — | — | — | — | 1 | 1 |
| Nyasaland | Cases | — | — | 24 | 47 | 74 | 48 |
| Tunisia | Cases | — | — | — | — | 2 | 1 |

* There were in addition 439 deaths from relapsing fever in Northern Nigeria.

Egyptian statistics show a rapid decline in the incidence of relapsing fever of recent years; only 5 cases were reported in 1924. According to official reports, there were only 2 cases elsewhere in North Africa.

Relapsing fever appeared in 1923 on the *Gold Coast* and in *Nigeria*, where it was previously unknown. The epidemic in Nigeria is of special interest owing to its unusually high case-fatality rate. The first 36 cases occurred in September 1923, of which 15 terminated fatally. An outbreak followed in Northern Nigeria lasting from May to September 1924, and causing 439 deaths in four localities. The disease reappeared in July 1924 in Southern Nigeria, where 253 cases and 24 deaths were reported, the highest incidence being in December.

## AMERICA.

No relapsing fever was reported from any country in America.

## ASIA.

Little information is available regarding the prevalence of relapsing fever in Asia, as it is only notifiable in a few countries. Twelve cases were reported in *Turkey* and 11 in *Palestine* during 1924; in the latter country there were 51 cases in 1921, 25 in 1922 and 8 in 1923. No case was reported in either *Iraq* or *Aden*, in both of which the disease is notifiable. It persisted in *Asiatic Russia*, although the incidence was much lower.

Cases of Relapsing Fever reported in Asiatic Russia, 1919–1924.

| | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|
| Siberia | — | 267,270 | 41,168 | 70,174 | 28,272 | 5,662 |
| Far Eastern Republic | — | — | — | — | 289 | 344 |
| Kirghiz Republic | 15,743 | 14,157 | 18,136 | 55,864 | 5,820 | 2,273 |
| Turkestan | — | — | 16,197 | 17,296 | 2,082 | 792 |
| Transcaucasia | — | — | — | 9,127 | 1,609 | 491 |

## EUROPE.

Relapsing fever in Europe during 1924 was practically confined to *Russia*. Only 546 cases were reported from other countries.

Cases of Relapsing Fever reported in European Countries, 1919–1924.

| | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|
| Austria | 104 | 0 | 1 | 1 | 0 | 0 |
| Czechoslovakia | 19 | 19 | 14 | 31 | 0 | 0 |
| Esthonia | 158 | 978 | 118 | 104 | 8 | 1 |
| Finland | 137 | 8 | 2 | 1 | 2 | 0 |
| Germany | — | — | 53 | 31 | 4 | 3 |
| Greece | — | — | — | — | — | 91 |
| Latvia | — | 547 | 275 | 116 | 10 | 3 |
| Lithuania | — | 732 | 1,031 | 910 | 13 | 11 |
| Poland | 3,266 | 7,188 | 13,850 | 41,207 | 2,067 | 366 |
| Roumania | — | 19,452 | 4,663 | 444 | 152 | 56 |
| European Russia (without Ukraine) | 392,546* | 1,570,604* | 698,147* | 942,460 | 149,493 | 27,695 |
| Ukraine | — | 362,075 | 247,089 | 467,893 | 54,814 | 4,505** |
| Kingdom of the Serbs, Croats and Slovenes | — | 23 | 69 | 21 | 13 | 15 |

* Including cases reported in the army, 116,971 in 1919; 700,323 in 1920; 240,915 in 1921.
** Eleven months only.

The incidence of relapsing fever in the various geographical divisions of Russia is shown below. The disease remains most prevalent in the south and in the Urals, but has elsewhere greatly diminished.

Cases of Relapsing Fever reported in Russia, by Geographical Divisions, 1923 and 1924.

| *Geographical Divisions.* | *Population* | 1923 | 1924 | *Rate per* 100,000 *in* 1924 |
|---|---|---|---|---|
| North-Eastern | 2,252,552 | 1,429 | 425 | 18.9 |
| North-Western | 5,320,270 | 1,154 | 390 | 7.3 |
| Western | 8,700,339 | 5,384 | 702 | 8.1 |
| Central Industrial | 17,982,853 | 10,532 | 1,911 | 10.6 |
| Central Black Earth | 10,457,676 | 18,305 | 2,661 | 25.0 |
| Middle Volga | 9,612,213 | 21,862 | 4,091 | 42.6 |
| Viatka-Vietluga | 3,317,984 | 7,279 | 449 | 13.5 |
| Ural | 8,030,577 | 60,134 | 9,998 | 124.5 |
| Lower Volga | 5,126,224 | 9,031 | 2,846 | 55.5 |
| South-Eastern | 8,119,062 | 14,383 | 4,222 | 52.0 |
| *Total for European Russia* (without Ukraine) | 78,919,750 | 149,493 | 27,965 | 35.4 |
| Ukraine | 27,628,381 | 54,814 | 4,505* | 16.3* |
| Transcaucasia | 5,674,603 | 1,609 | 491 | 8.7 |
| Siberia | 8,105,606 | 28,272 | 5,662 | 69.9 |
| Far Eastern Republic | 1,810,112 | 289 | 344 | 19.0 |
| Kirghiz Republic | 4,475,061 | 5,820 | 2,273 | 50.8 |
| Turkestan | 7,077,722 | 2,082 | 792 | 11.2 |
| Railways, Waterways, Prisons | — | 15,892 | 1,415 | — |
| *Total for all Russia* | 134,853,752 | 258,271 | 43,177 | 32.1 |

* Eleven months only.

It will be seen from the table below that the incidence of relapsing fever has diminished each month since the period of its maximum in March and May 1922. The winter rise in January 1923 and 1924 was barely perceptible, and the number of cases reported during the final months of 1924 was lower than was usually the case at this season before the war.

Cases of Relapsing Fever reported in Russia (Whole Territory), by Months, 1920 – 1924.

| *Month.* | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|
| January | 165,885 | 181,050 | 183,526 | 69,401 | 7,648 |
| February | 229,663 | 153,126 | 186,528 | 47,111 | 6,960 |
| March | 221,895 | 120,238 | 206,109 | 36,848 | 5,341 |
| April | 187,155 | 84,010 | 162,470 | 25,478 | 5,124 |
| May | 129,413 | 59,884 | 193,012 | 19,990 | 3,949 |
| June | 106,992 | 53,607 | 159,451 | 12,694 | 2,644 |
| July | 80,527 | 40,692 | 126,590 | 11,009 | 3,049 |
| August | 21,072 | 32,694 | 98,058 | 10,398 | 2,633 |
| September | 54,928 | 33,928 | 66,188 | 7,564 | 2,248 |
| October | 58,359 | 53,299 | 56,634 | 7,296 | 1,556 |
| November | 67,890 | 91,388 | 62,827 | 5,338 | 688 |
| December | 86,845 | 115,821 | 56,310 | 5,169 | 776 |

The rapid decline in relapsing fever in the various districts of *Poland* is shown in the table below.

Relapsing Fever Cases and Deaths reported in Poland, by Provinces, 1922 – 1924.

| | 1922 | | 1923 | | 1924 | |
|---|---|---|---|---|---|---|
| *Eastern Zone.* | *Cases* | *Deaths* | *Cases* | *Deaths* | *Cases* | *Deaths* |
| Bialystock | 7,411 | 363 | 262 | 3 | 4 | 0 |
| Nowogrodek | 6,926 | 284 | 648 | 14 | 60 | 0 |
| Polesia | 12,871 | 253 | 330 | 7 | 25 | 0 |
| Volhynia | 4,863 | 148 | 221 | 6 | 45 | 1 |
| Tarnopol | 53 | 1 | 19 | 0 | 2 | 0 |
| Vilna | 784 | 22 | 280 | 4 | 87 | 0 |
| | 32,908 | 1,121 | 1,760 | 34 | 223 | 1 |

RELAPSING FEVER CASES AND DEATHS REPORTED IN POLAND, BY PROVINCES, 1922-1924 *(continued)*.

| | 1922 | | 1923 | | 1924 | |
|---|---|---|---|---|---|---|
| *East Central Zone.* | *Cases* | *Deaths* | *Cases* | *Deaths* | *Cases* | *Deaths* |
| Warsaw City | 201 | 15 | 16 | 1 | 4 | 0 |
| Warsaw District | 32 | 0 | 8 | 0 | 5 | 0 |
| Lublin | 7,733 | 280 | 200 | 6 | 12 | 0 |
| Lwow | 234 | 37 | 13 | 2 | 77 | 4 |
| Stanislawow | 114 | 7 | 7 | 0 | 35 | 4 |
| TOTAL | 8,314 | 339 | 244 | 9 | 133 | 8 |
| *West Central Zone.* | | | | | | |
| Lodz | 18 | 1 | 3 | 0 | 2 | 0 |
| Kielce | 135 | 0 | 11 | 0 | 6 | 1 |
| Cracow | 51 | 3 | 11 | 0 | 1 | 0 |
| TOTAL | 204 | 4 | 25 | 0 | 9 | 1 |
| *Western Zone.* | | | | | | |
| Pomerania | 5 | 0 | 14 | 1 | 1 | 0 |
| Posen | 11 | 1 | 3 | 0 | 0 | 1 |
| Siberia | 0 | 0 | 0 | 0 | 0 | 1 |
| TOTAL | 16 | 1 | 17 | 1 | 1 | 2 |

Relapsing fever records for other European countries do not call for much comment. In *Roumania*, where the disease was prevalent in 1920 and 1921, only 56 cases were reported in 1924. In *Greece* there were 91, in the *Serb-Croat-Slovene Kingdom* 15 cases, during 1924. Fifteen cases were reported in the *Baltic Republics* and 3 in *Germany*. Not a single case was reported in any other European country.

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## SMALLPOX

### AFRICA.

Information regarding the prevalence of smallpox has been received from the countries shown below:

| *Country* | | *1919* | *1920* | *1921* | *1922* | *1923* | *1924* |
|---|---|---|---|---|---|---|---|
| Algeria | Cases | 812 | 1,172 | 755 | 184 | 141 | 483 |
| Basutoland | Cases | — | — | 521 | 421 | 671 | 474 |
| | Deaths | — | — | 53 | 46 | 14 | 22 |
| Egypt | Cases | 7,928 | 3,021 | 93 | 309 | 519 | 799 |
| | Deaths | 1,938 | 805 | 24 | 90 | 145 | 221 |
| Gold Coast | Cases | — | — | — | — | 13 | 153 |
| | Deaths | — | — | — | — | 0 | 4 |
| Kenya | Cases | 543 | — | — | — | 108 | 3 |
| Nigeria | Cases | — | — | 1,031 | — | 1,222 | 484 |
| | Deaths | — | — | 189 | — | 189 | 128 |
| Nyasaland | Cases | — | — | — | — | 14 | — |
| Rhodesia: | | | | | | | |
| Northern | Cases | — | — | — | — | 59 | 258 |
| | Deaths | — | — | — | — | 9 | 17 |
| Southern | Cases | — | — | 515 | 501 | 16 | 2 |
| | Deaths | — | — | 145 | 21 | 8 | 0 |
| Sierra Leone | Cases | — | 6 | — | 1 | 18 | 10 |
| Tanganyika | Cases | — | — | 1,267 | 390 | 217 | 30 |
| | Deaths | — | — | 151 | 46 | 33 | 12 |
| Tunisia | Cases | — | — | — | — | 279 | 606 |
| Uganda | Cases | — | — | 506 | 104 | 97 | 7 |
| | Deaths | — | — | 89 | 12 | 10 | 1 |
| Union of South Africa | Cases | 559 | 1,036 | 1,108 | 713 | 285 | 346 |
| | Deaths | — | — | 19 | 23 | 8 | 2 |
| Zanzibar | Cases | 4 | 7 | 158 | 167 | 225 | 5 |
| | Deaths | 1 | 1 | 56 | 54 | 2 | 0 |

There was during 1924 a marked increase of smallpox throughout Northern Africa. There occurred in *Algeria* 483 cases as against 141 in 1923, and 606 in *Tunisia* as against 279 in the previous year. Higher incidence was also reported in *Egypt*, particularly during the months of April, May and June, but the outbreak was very much smaller than those of 1919 and 1920. Less important outbreaks were also reported from various localities on the Guinea Coast, notably in *Nigeria* and the *Gold Coast Colony*. Returns for *Northern Rhodesia* also show an increase in this disease. In the *Union of South Africa* there were 346 cases in 1924 as against 285 during the previous year. The majority (202) occurred in Cape Colony. It may be added that the disease is far more frequent among the native population than among Europeans — 320 cases having been reported among the former as against 26 among the latter. The case fatality was very low; only 2 deaths were reported.

## AMERICA.

There was a distinct increase of smallpox in North America during 1924. Reports are available for only a few South American countries; but in all of these the incidence showed a marked decrease. The decline of smallpox in Chile of recent years is noteworthy.

| *Country* | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| Argentine | Deaths | 6 | — | — | — | 1 | 0 |
| Brazil: | | | | | | | |
| Rio de Janeiro | Deaths | 305 | 99 | 49 | 117 | 38 | 4* |
| São Paolo | Deaths | 7 | 416 | 29 | 7 | — | — |
| Canada | Cases | — | — | — | — | — | 2,791 |
| | Deaths | — | — | — | — | — | 57 |
| Ontario only | Cases | 3,049 | 5,639 | 3,777 | 977 | 355 | 594 |
| Chile | Cases | 9 | 15 | 11,701 | 8,494 | 3,502 | 260* |
| | Deaths | 6 | 13 | 5,131 | 3,621 | 1,551 | 102* |
| Cuba | Cases | 54 | 817 | 7,339 | 1,086 | 13 | 0 |
| Havana | Cases | 55 | 15 | 47 | 34 | 0 | 0 |
| | Deaths | 2 | 1 | 0 | 1 | 0 | 0 |
| Dominican Republic | Cases | — | — | — | — | — | 2 |
| British Guiana | Cases | — | — | 0 | 0 | 1 | 0 |
| Hawaii | Cases | — | — | 4 | 2 | 1 | 3 |
| Mexico | Deaths | — | — | — | — | — | 2,702 |
| Panama Canal Zone | Cases | 65 | 25 | 215 | 14 | 0 | 0 |
| | Deaths | 0 | 0 | 2 | 0 | 0 | 0 |
| Peru: | | | | | | | |
| Lima | Deaths | — | — | — | — | 5 | 0* |
| Callao | Deaths | — | — | — | — | 0 | 0* |
| Porto Rico | Cases | 10 | 2 | 1 | 6 | 0 | — |
| St. Lucia | Cases | — | — | — | 1 | 0 | — |
| United States (total of States reporting) | Cases | 56,332 | 96,684 | 102,787 | 32,800 | 29,968 | 51,429 |
| Uruguay | Cases | 0 | — | 31 | — | 23 | 162 |
| | Deaths | 0 | 2 | 15 | — | 16 | 7 |

* January 1st to June 30th.

*United States.* — The number of smallpox cases reported in the United States in 1924 was 51,429, nearly double the figure for 1923. The greatest prevalence occurred in the Pacific and East North Central States. California reported the largest number of cases, followed by Ohio, Michigan and Indiana. The notification of smallpox cases, however, does not always reveal the real gravity of the situation. A mild form of the disease has prevailed for years in the Middle West, West and Southern States. Many of these cases are never seen by a physician, or only during the onset of the disease and not during the period of eruption. The case fatality is extremely low and complications are rare. This type of smallpox spreads slowly, sparing individuals who have been vaccinated as long ago as forty or fifty years. Only the aged and invalids die. In Ohio, for instance, with from 2,000 to 7,000 cases yearly, the annual number of deaths is usually under ten. Occasionally a more virulent form is introduced from outside, which spreads rapidly among the unvaccinated population. Such instances occurred in 1924, notably in Michigan, Minnesota and Ohio. An outbreak of mild smallpox in Detroit was on the decline when a more virulent type was introduced and stringent measures had to be taken to control it. The case fatality reached nearly 25 per cent, and the epidemic was not brought under control until wholesale vaccination was enforced by the police and health departments. At the same time, an epidemic of the same type occurred across the border in Canada, and some 50 deaths were registered also

in Ohio — principally in Toledo, which lies on the border of Michigan and is closely connected with Detroit by railroads and automobile traffic. In these three localities — Detroit, Canada and Ohio — physicians experienced difficulty in determining the nature of the disease, which was usually misdiagnosed, until a mild case occurred among individuals who had been exposed and were protected partially by an old vaccination. Virulent smallpox appeared in Minnesota, especially in Minneapolis, where the case fatality was high, and the epidemic was still not under control at the end of 1924. The prevalence of smallpox in the United States is in direct ratio to the enforcement of vaccination, which is more general in the Eastern States than elsewhere. Thus, Massachusetts and several other New England States show a notable freedom from the disease.

The following table shows the prevalence in the United States, from 1919 to 1924, for those States for which figures are available.

SMALLPOX CASES REPORTED IN THE UNITED STATES, 1919-1924.

| | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|
| *New England States:* | | | | | | |
| Maine | 443 | 256 | 96 | 35 | 117 | 19 |
| New Hampshire | 0 | 0 | 19 | 0 | 39 | * |
| Vermont | 5 | 0 | 177 | 14 | 247 | 64 |
| Massachusetts | 40 | 29 | 37 | 2 | 6 | 12 |
| Rhode Island | 5 | 1 | 1 | 9 | 0 | 3 |
| Connecticut | 6 | 2 | 8 | 447 | 51 | 100 |
| *Mid. Atlantic States:* | | | | | | |
| New York | 191 | 307 | 631 | 255 | 391 | 491 |
| New Jersey | 109 | 182 | 255 | 18 | 30 | 311 |
| Pennsylvania | 229 | 215 | 212 | 85 | 183 | 118 |
| *South Atlantic States:* | | | | | | |
| Delaware | 0 | 27 | 0 | 0 | 0 | 1 |
| Maryland | 229 | 179 | 214 | 17 | 24 | 94 |
| D. of Columbia | 173 | 89 | 66 | 66 | 68 | 147 |
| Virginia | 1,972 | 3,468 | 1,873 | 511 | 409 | 285 |
| N. Carolina | 2,321 | 2,961 | 2,513 | 1,409 | 3,352 | 3,659 |
| S. Carolina | 304 | 1,118 | 1,084 | 342 | 549 | 693 |
| Georgia | 1,710 | 1,328 | 2,191 | 756 | 673 | 2,107 |
| Florida | 45 | 428 | 1,351 | 318 | 228 | 118 |
| *East South Central States:* | | | | | | |
| Kentucky | * | * | * | 460 | * | 322 |
| Tennessee | * | * | 2,913 | 567 | 1,037 | 3,100 |
| Alabama | 935 | 1,442 | 2,072 | 623 | 352 | 2,241 |
| Mississippi | 2,502 | 3,148 | 2,161 | 729 | 292 | 711 |
| *West South Central States:* | | | | | | |
| Arkansas | 588 | 789 | 481 | 173 | 315 | 467 |
| Louisiana | 1,226 | 1,564 | 1,421 | 645 | 692 | 488 |
| Oklahoma | * | * | 1,393 | 736 | 1,183 | 1,007 |
| Texas | * | 2,113 | 1,781 | 1,427 | 669 | * |
| *East North Central States:* | | | | | | |
| Ohio | 4,107 | 7,209 | 7,286 | 2,422 | 2,277 | 5,334 |
| West Virginia | 2,217 | 2,592 | 2,443 | 453 | 255 | 434 |
| Indiana | 3,833 | 5,775 | 4,809 | 1,075 | 1,911 | 3,751 |
| Illinois | 3,334 | 8,527 | 8,536 | 2,116 | 928 | 1,357 |
| Michigan | 2,460 | 4,845 | 4,537 | 1,231 | 2,311 | 4,527 |
| Wisconsin | 3,288 | 5,668 | 5,216 | 1,790 | 1,338 | 1,236 |
| *West North Central States:* | | | | | | |
| Minnesota | 2,448 | 6,333 | 9,375 | 2,215 | 1,866 | 3,067 |
| Iowa | 1,794 | 4,503 | 5,204 | 749 | 668 | 872 |
| Missouri | * | * | * | 657 | 667 | 635 |
| N. Dakota | 211 | 533 | 1,777 | 657 | 429 | 575 |
| S. Dakota | 920 | 1,534 | 1,959 | 859 | 243 | 286 |
| Nebraska | 2,844 | 4,135 | 3,048 | 484 | 95 | 286 |
| Kansas | 2,437 | 3,900 | 4,630 | 842 | 459 | 1,154 |

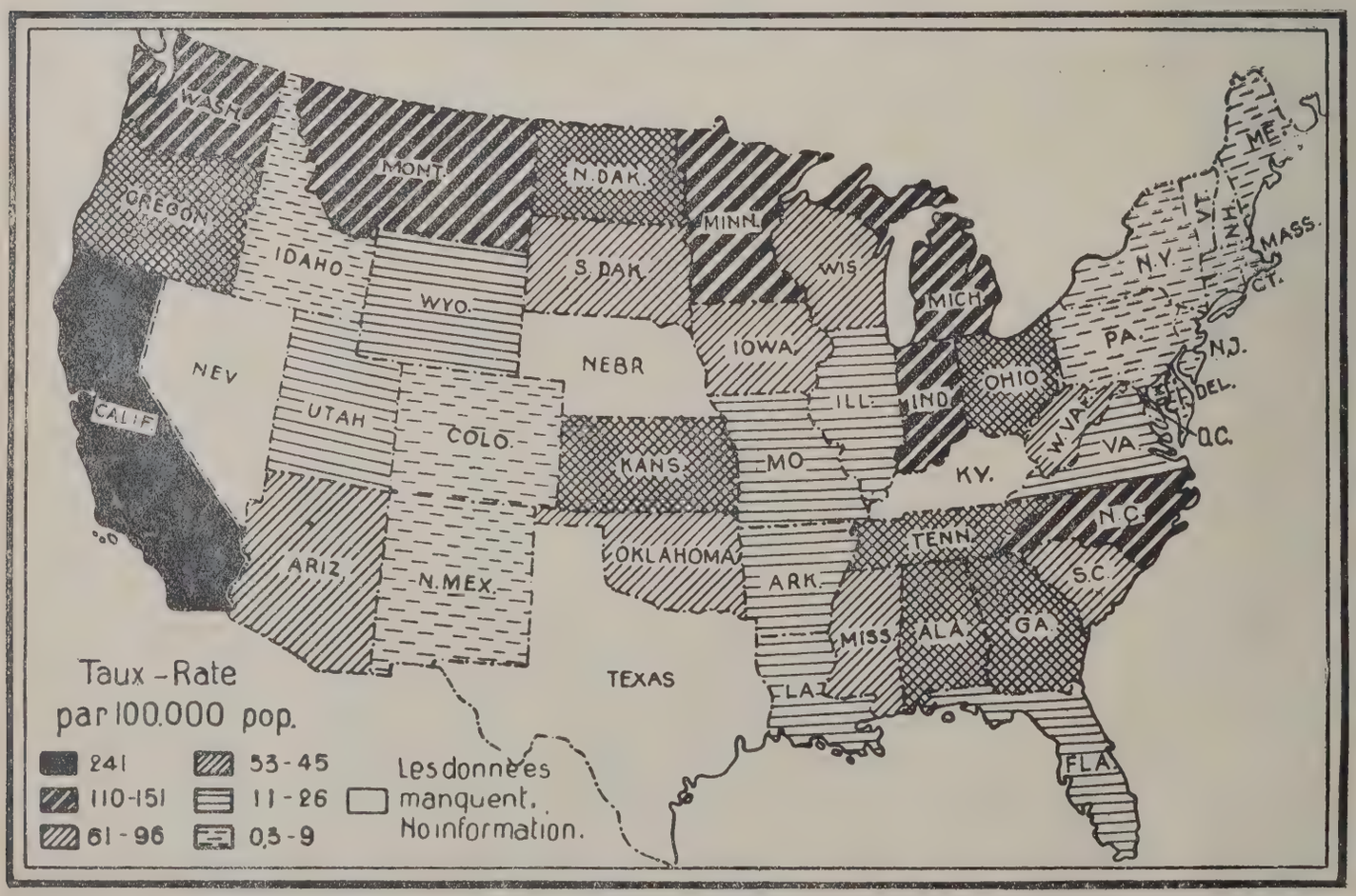
* Data not available.

SMALLPOX CASES REPORTED IN THE UNITED STATES 1919-1924 *(continued)*.

| | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|
| *Mountain States:* | | | | | | |
| Montana | 970 | 1,066 | 1,466 | 636 | 732 | 950 |
| Idaho | * | 2,556 | 857 | 241 | 123 | 547 |
| Wyoming | 462 | 911 | 434 | 206 | 20 | 43 |
| Colorado | 1,715 | 2,898 | 2,606 | 1,086 | 90 | 74 |
| New Mexico | * | 251 | 110 | 53 | 97 | 31 |
| Arizona | * | 172 | 192 | 468 | 101 | 160 |
| Utah | 1,238 | * | 3,499 | * | * | 123 |
| Nevada | * | * | 235 | 51 | 10 | 1 |
| *Pacific Coast States:* | | | | | | |
| California | 2,002 | 4,486 | 5,581 | 2,129 | 2,028 | 9,425 |
| Oregon | 2,629 | 2,998 | 1,596 | 1,141 | 813 | 800 |
| Washington | 4,390 | 6,146 | 4,441 | 1,595 | 1,600 | 1,932 |
| TOTAL U. S. A. | 56,332 | 96,684 | 102,787 | 32,800 | 29,968 | 55,538 |

* Data not available.

INCIDENCE OF SMALLPOX CASES REPORTED IN THE UNITED STATES, 1924.




## ASIA.

Available reports indicate little change in the prevalence of smallpox in Asia during 1924. There was an increase in the number of deaths registered in India, where the number for 1924 was higher than in 1922 and 1923. The following data for 1924 have been received:

| *Country* | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| Aden | Cases | — | — | — | — | 43 | 9 |
| | Deaths | — | — | — | — | 6 | 1 |
| Ceylon | Cases | 35 | 126 | 18 | 337 | 175 | 40 |
| Cyprus | Cases | 242 | 17 | 8 | 86 | 1 | — |
| Hong-Kong | Cases | 27 | 34 | 191 | 212 | 1,320 | 941 |
| | Deaths | 15 | 21 | 162 | 189 | 1,141 | 854 |
| British India | Deaths | 136,077 | 101,329 | 40,446 | 40,836 | 41,571 | 46,374 |
| Iraq | Cases | — | — | 475 | 1,826 | 885 | 548 |
| | Deaths | — | — | — | — | 325 | 322 |
| Japan | Cases | 4,055 | 3,167 | 889 | 679 | 1,922 | 1,702 |
| | Deaths | 1,115 | 844 | 212 | 124 | 381 | 266 |
| Java and Madura | Cases | 4,383 | 2,400 | 1,445 | 1,086 | — | 5,994 |
| | Deaths | 955 | 467 | 274 | 275 | — | 1,303 |
| Korea | Cases | 2,180 | 11,532 | 8,316 | 3,676 | 3,722 | 439 |
| | Deaths | 675 | 3,614 | 2,527 | 1,160 | 1,120 | 85 |
| Malay States: | | | | | | | |
| Federated | Cases | — | — | 76 | 16 | 32 | 6 |
| | Deaths | — | — | 0 | 2 | 9 | 0 |
| Unfederated: | | | | | | | |
| Kedah | Cases | — | — | — | — | 3 | 23 |
| | Deaths | — | — | — | — | 0 | 3 |
| Kelantan | Cases | — | — | 1 | — | 2 | 0 |
| | Deaths | — | — | 0 | — | 0 | 0 |
| Palestine | Cases | — | — | 2 | 159 | 9 | 23 |
| | Deaths | — | — | 2 | 16 | 5 | 2 |
| Shanghai | Cases | — | — | — | — | — | 46 |
| | Deaths | 0 | 0 | 227 | 240 | — | 20 |
| Siam | Cases | 50* | 85* | 404* | 460 | 583 | 588 |
| | Deaths | 19* | 26* | 102* | 117 | 229 | 173 |
| Singapore | Cases | 14 | 4 | 156 | 268 | 32 | 14 |
| | Deaths | 3 | 2 | 33 | 58 | 2 | 7 |
| Straits Settlements | Cases | 480 | 105 | 155 | 330 | 36 | 0 |
| | Deaths | 166 | 43 | 37 | 80 | 3 | 0 |
| Turkey | Cases | — | — | — | — | — | 838 |
| | Deaths | — | — | — | — | — | 124 |

* According to the Siamese calender year, dating from April 1st to March 31st.

*Hong-Kong.* — The epidemic wave of smallpox which reached its height in the last three months of 1923, and continued almost unabated during the first two months of 1924, declined steadily thereafter. No cases were reported during the period from August to November and only 6 during the last two months of the year. The number of deaths almost equalled the number of cases reported, which may suggest that the cases were more numerous than the reports show.

Seasonal Variation of Smallpox in Hong-Kong, 1923-1924.

| | 1923 | | | 1924 | |
|---|---|---|---|---|---|
| *4 weeks ending:* | *Cases* | *Deaths* | *4 weeks ending:* | *Cases* | *Deaths* |
| January 27th | 3 | 1 | January 26th | 396 | 413 |
| February 24th | 10 | 6 | February 23rd | 290 | 219 |
| March 24th | 30 | 26 | March 22nd | 148 | 136 |
| April 17th | 52 | 28 | April 19th | 56 | 49 |
| May 15th | 57 | 50 | May 17th | 32 | 25 |
| June 12th | 63 | 60 | June 14th | 10 | 7 |
| July 10th | 72 | 54 | July 12th | 4 | 4 |
| August 7th | 26 | 25 | August 9th | 0 | 0 |
| September 4th | 23 | 17 | September 6th | 0 | 0 |
| October 2nd | 31 | 24 | October 4th | 0 | 0 |
| October 30th | 172 | 146 | November 1st | 0 | 0 |
| November 27th | 393 | 316 | November 29th | 1 | 0 |
| December 25th | 366 | 291 | December 27th | 4 | 1 |
| Total | 1,298 | 1,044 | Total | 941 | 854 |

*India.* — The number of deaths from smallpox reported in India increased especially in Bombay, the United Provinces and Bihar and Orissa. It was lower in Burma, Assam and Madras. In India as a whole, the number of deaths was higher than any year since 1920.

DEATHS FROM SMALLPOX REPORTED IN INDIA, BY PROVINCES, 1912-1924.

| *Provinces* | *Population in thousands (1921 Census)* | 1912 | 1913 | 1914 | 1915 | 1916 | 1917 | 1918 | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bengal | 46,696 | 8,287 | 9,062 | 9,935 | 32,785 | 13,890 | 7,010 | 8,576 | 37,010 | 36,190 | 8,157 | 7,864 | 4,234 | 5,170 |
| Bihar and Orissa | 34,012 | 2,357 | 3,935 | 5,778 | 15,526 | 11,874 | 6,643 | 6,091 | 10,175 | 23,001 | 7,836 | 2,560 | 3,110 | 6,731 |
| Burman | 13,212 | 7,950 | 2,816 | 258 | 217 | 707 | 559 | 750 | 3,917 | 2,853 | 987 | 1,439 | 2,720 | 782 |
| Assam | 7,606 | 4,696 | 2,794 | 2,575 | 4,076 | 3,321 | 4,116 | 2,447 | 1,432 | 1,700 | 2,774 | 2,610 | 3,219 | 1,549 |
| Bombay | 19,348 | 6,331 | 9,833 | 4,209 | 1,425 | 3,289 | 3,095 | 8,063 | 6,232 | 3,536 | 1,771 | 1,170 | 2,495 | 8,834 |
| Madras | 42,319 | 16,094 | 14,802 | 27,889 | 24,038 | 21,903 | 34,958 | 58,752 | 417,732 | 13,697 | 9,792 | 22,801 | 22,433 | 13,773 |
| Punjab | 20,685 | 30,339 | 38,687 | 2,900 | 1,694 | 2,886 | 1,417 | 3,032 | 15,365 | 9,319 | 4,575 | 1,608 | 2,053 | 3,573 |
| Central Provinces and Berar | 13,913 | 4,556 | 6,410 | 4,581 | 1,151 | 339 | 452 | 3,186 | 7,342 | 2,176 | 1,787 | 407 | 275 | 928 |
| United Provinces | 45,376 | 3,101 | 8,156 | 17,954 | 2,304 | 1,515 | 2,011 | 2,908 | 10,993 | 6,354 | 1,439 | 242 | 734 | 2,365 |
| Total for British India * | 318,942 | 89,357 | 98,155 | 76,590 | 83,282 | 60,642 | 62,277 | 93,076 | 136,077 | 101,329 | 40,446 | 40,836 | 41,440 | 46.374 |

* Figures taken from the Annual Report of the Public Health Commissioner, 1922.

Smallpox was most prevalent in Northern India during the second quarter of 1924 and in Southern India during the first quarter. The disease returned to its normal level during the final five months of the year.

A considerable number of deaths from smallpox occurred in the city of Bombay, but the disease was less prevalent in the cities of Calcutta, Rangoon and Madras than for several years.

DEATHS FROM SMALLPOX REPORTED IN THE LARGE CITIES OF INDIA, 1919–1924.

| *City* | *Population (1921 Census)* | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| Bombay | 1,176,000 | 780 | 294 | 406 | 61 | 445 | 1,113 |
| Calcutta | 1,132,000 | 1,870 | 2,925 | 89 | 450 | 156 | 263 |
| Rangoon | 342,000 | 656 | 120 | 18 | 72 | 366 | 107 |
| Madras | 527,000 | 611 | 109 | 180 | 1,121 | 151 | 168 |

## AUSTRALASIA.

As usual, no cases of smallpox were reported during 1924 in Australia or New Zealand.

## EUROPE

Available reports indicate an improvement in the smallpox situation in Europe in 1924. The most marked decrease was in European Russia, the Kingdom of the Serbs, Croats and Slovenes and Switzerland. There was an increased incidence in England and Wales and in Poland, and the number of deaths from smallpox reported in Spain is more than double that for 1923. Austria, Danzig, Hungary and the towns of Norway were entirely free from smallpox during 1924. On the other hand, a few cases were reported in Denmark, which is ordinarily free from the disease.

CASES OF SMALLPOX REPORTED IN EUROPE 1919-1924.

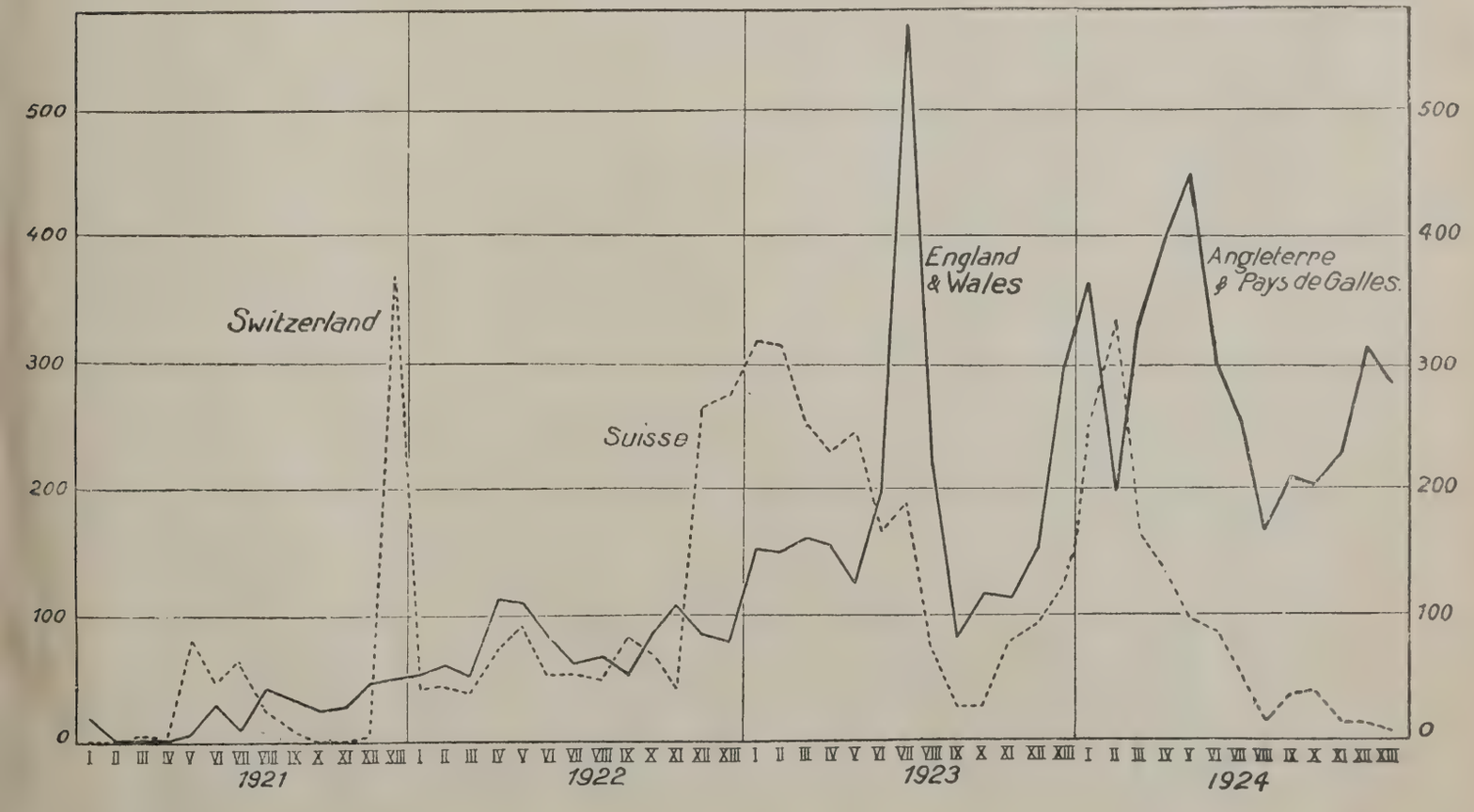
| *Countries* | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|
| Austria | 411 | 253 | 18 | 4 | 17 | 0 |
| Belgium | 42 | 91 | 21 | 23 | 31 | 31 |
| Bulgaria | 874 | 527 | 22 | 24 | 20 | 5 |
| Czechoslovakia | 11,209 | 4,529 | 1,542 | 70 | 36 | 9 |
| Danzig | 185 | 22 | 0 | 0 | 0 | 0 |
| Denmark | 0 | 0 | 7 | 0 | 0 | 25 |
| England and Wales | 294 | 263 | 315 | 973 | 2,485 | 3,765 |

Cases of Smallpox reported in Europe 1921-1924 *(continued)*.

| *Countries* | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|
| Esthonia | 267 | 435 | 136 | 50 | 13 | 4 |
| Finland | 1,759 | 77 | 27 | 91 | 12 | 1 |
| France | 572 | 392 | 341 | 172 | 195 | 210 |
| Germany | 5,012 | 2,042 | 688 | 215 | 17 | 16 |
| Greece | — | — | — | — | 2,116 | 250 |
| Hungary | — | — | 131 | 2 | 9 | 1 |
| Italy | 34,365 | 26,453 | 4,644 | 534 | 495 | 190 |
| Kingdom of the Serbs, Croats and Slovenes | — | 4,156 | 2,119 | 728 | 1,042 | 330 |
| Latvia | — | 422 | 255 | 160 | 23 | 25 |
| Lithuania | — | 1,213 | 1,035 | 345 | 25 | 58 |
| Netherlands | 5 | 50 | 1 | 0 | 2 | 3 |
| Norway (towns) | 0 | 0 | 1 | 0 | 0 | 0 |
| Poland | 1,864 | 3,948 | 5,078 | 2,399 | 502 | 861 |
| Roumania | 20,523 | 3,467 | 2,745 | 865 | 89 | 8 |
| Russia in Europe (without Ukraine) | 169,545 | 121,587 | 68,503 | 40,839 | 29,133 | 18,596 |
| Ukraine | — | 34,730 | 28,123 | 11,095 | 3,710 | 1,012* |
| Scotland | 9 | 725 | 106 | 7 | 3 | 3 (16 cities) |
| Spain (deaths) | 3,620 | 3,280 | 2,087 | 1,332 | 529 | 1,214 |
| Sweden | 7 | 11 | 2 | 0 | 0 | 1 |
| Switzerland | 3 | 2 | 596 | 1,153 | 2,126 | 1,234 |

* First eleven months only.

Cases of Smallpox reported in England and Wales and in Switzerland by four-weekly Periods, 1921-1924.




*England and Wales.* — In England and Wales the number of cases reported in 1924 represents a considerable increase over 1923, in continuation of the trend of previous years, as shown in the following table.

Smallpox Cases and Deaths reported in England and Wales, 1918-1924.

| | *Cases* | *Deaths* | *Case fatality per cent* | | *Cases* | *Deaths* | *Case fatality per cent* |
|---|---|---|---|---|---|---|---|
| 1918 | 63 | — | — | 1922 | 973 | 27 | 2.9 |
| 1919 | 294 | 28 | 9.5 | 1923 | 2,485 | 7 | 0.3 |
| 1920 | 263 | 30 | 11.4 | 1924 | 3,765 | 13 | 0.3 |
| 1921 | 315 | 5 | 1.6 | | | | |

The gradual fall in the case-fatality rate which has accompanied the increased prevalence may also in part account for the unusual spread of the disease.

Smallpox was not widespread in England, but occurred in a series of localised outbreaks, of which the most important in 1924 affected the counties of Derby, York and Nottingham. In Gloucestershire, in which more than a third of the cases in 1923 occurred, the number in 1924 was comparatively small. The following table shows the prevalence of smallpox in the counties most affected:

| | 1922 | | 1923 | | 1924 | |
|---|---|---|---|---|---|---|
| *Counties* | *Cases* | *Percentage of total* | *Cases* | *Percentage of total* | *Cases* | *Percentage of total* |
| York | 462 | 46.0 | 393 | 15.8 | 651 | 17.3 |
| Derby | 231 | 22.8 | 468 | 18.8 | 1,329 | 36.4 |
| Nottingham | 73 | 7.2 | 434 | 17.5 | 531 | 14.1 |
| Lancaster | 52 | 5.1 | 78 | 3.1 | 104 | 2.8 |
| London | 49 | 4.8 | 11 | 0.4 | 4 | 0.1 |
| Gloucester | 0 | 0 | 935 | 37.7 | 144 | 3.8 |
| Durham | 0 | 0 | 48 | 1.9 | 21 | 0.6 |

*Germany.* — Only 16 cases of smallpox were reported in Germany during 1924, of which 15 occurred in Prussia and 1 in Baden.

*Greece.* — Smallpox showed a marked decline in Greece in 1924. The high fatality rate is probably due to a malignant type of the disease. The comparative freedom from the disease in the latter months of the year is noteworthy

Smallpox Cases reported in Greece, 1923-1924.

| | 1923 | 1924 | | | 1923 | 1924 | |
|---|---|---|---|---|---|---|---|
| *Month.* | *Cases* | *Cases* | *Deaths* | *Month* | *Cases* | *Cases* | *Deaths* |
| January | 325 | 17 | 2 | August | 48 | 8 | 1 |
| February | 280 | 19 | 7 | September | 37 | 4 | 0 |
| March | 260 | 24 | 9 | October | 11 | 5 | 0 |
| April | 336 | 57 | 10 | November | 21 | 3 | 0 |
| May | 406 | 38 | 3 | December | 44 | 2 | 0 |
| June | 229 | 46 | 4 | | | | |
| July | 119 | 27 | 14 | Total | 2,116 | 250 | 50 |

The number of deaths in the whole of Greece during 1923 is not yet available, but in that year 287 deaths were registered in Athens and Piræus alone.

*Italy.* — Smallpox has declined steadily in Italy since 1919, when it reached its maximum. The number of cases reported in 1924 is the lowest on record.

Smallpox Cases reported in Italy, 1910-1924.

| *Year* | *Cases* | *Year* | *Cases* |
|---|---|---|---|
| 1910 | 3,121 | 1918 | 4,519 |
| 1911 | 17,047 | 1919 | 34,365 |
| 1912 | 13,202 | 1920 | 26,453 |
| 1913 | 1,414 | 1921 | 4,644 |
| 1914 | 859 | 1922 | 534 |
| 1915 | 626 | 1923 | 495 |
| 1916 | 641 | 1924 | 190 |
| 1917 | 1,267 | | |

*Poland.* — The steady decline in smallpox in Poland since 1920 was interrupted by a slight increase in 1924, from 502 cases in 1923 to 860 in 1924. The morbidity and mortality distribution in 1924 is shown below according to zones.

Smallpox Cases reported in Poland, by Geographical Divisions, in 1924.

| *Zone* | *Cases* | *Deaths* |
|---|---|---|
| Eastern | 30 | 3 |
| East Central | 15 | 4 |
| West Central | 698 | 106 |
| Western | 117 | 13 |
| Total | 860 | 126 |

Most of the cases occurred in Western Poland, especially in the provinces of Cracow (540 cases and 77 deaths) and Kielce (140 cases and 29 deaths).

*Russia.* — The highest incidence of smallpox in Russia occurred in the North-Eastern, Ural and Middle Volga Regions. Smallpox was least prevalent in Southern and Western Russia.

Smallpox Cases reported in Russia, 1923 and 1924.

| *Geographical Division* | *Population* | 1923 | 1924 | *Rate per* 100,000 *pop. for* 1924 |
|---|---|---|---|---|
| North-Eastern | 2,252,552 | 8,653 | 4,066 | 180.5 |
| North-Western | 5,320,270 | 1,103 | 839 | 15.8 |
| Western | 8,700,339 | 897 | 522 | 6.0 |
| Central Industrial | 17,982,853 | 3,003 | 2,107 | 11.7 |
| Central Black Earth | 10,457,676 | 2,026 | 399 | 3.8 |
| Middle Volga | 9,612,213 | 3,472 | 3,877 | 40.3 |
| Viatka-Vietluga | 3,317,984 | 2,693 | 958 | 28.9 |
| Ural | 8,030,577 | 4,084 | 4,729 | 58.9 |
| Lower Volga | 5,126,224 | 436 | 222 | 4.3 |
| South-Eastern | 8,119,062 | 2,766 | 877 | 10.8 |
| *Total for European Russia* (without Ukraine) | 78,919,750 | 29,133 | 18,596 | 23.6 |
| Ukraine | 27,628,381 | 3,710 | 1,012 | 3.7* |
| Transcaucasia | 5,674,603 | 734 | 157 | 2.8 |
| Siberia | 8,105,606 | 6,524 | 2,545 | 31.4 |
| Far Eastern Republic | 1,810,112 | 697 | 127 | 7.0 |
| Kirghiz Republic | 4,475,061 | 940 | 729 | 16.3** |
| Turkestan | 7,077,722 | 710 | 323 | 4.6** |
| Railways, Waterways and Prisons | — | 2,178 | 727 | — |
| *Total for Russia* | 134,853,752 | 44,626 | 24,067 | 178.5 |

* Eleven months only.
** Nine months only.

Smallpox incidence has declined steadily in Russia since 1919, when 170,350 cases were reported. The number of cases reported in each of the fifteen years preceding the war varied between 72,000 and 165,000. In view of this, the number of smallpox cases reported during the last half of 1924 is remarkably low, although this is the season when the disease is usually least frequent.

Seasonal incidence of Smallpox Cases reported in Russia, 1923 and 1924.

| *Period* 1923 | *European Russia* | *Ukraine* | *Trans-caucasia* | *Siberia* | *Far East. Rep.* | *Kirghiz Rep.* | *Turkes-tan* | *Waterways, Railways, Prisons* | *Total* |
|---|---|---|---|---|---|---|---|---|---|
| January to March | 13,548 | 1,787 | 407 | 3,041 | 441 | 634 | 348 | 1,126 | 21,332 |
| April to June | 10,251 | 1,293 | 300 | 2,263 | 226 | 245 | 143 | 591 | 15,312 |
| July to September | 2,730 | 315 | 18 | 685 | 25 | 61 | 80 | 220 | 3,534 |
| October to December | 2,604 | 315 | 9 | 545 | 5 | — | 139 | 241 | 3,548 |
| Total | 29,133 | 3,710 | 734 | 6,524 | 697 | 940 | 710 | 2,178 | 44,626 |

SEASONAL INCIDENCE OF SMALLPOX CASES REPORTED IN RUSSIA, 1923 AND 1924 *(continued)*.

| 1924 *Period* | *European Russia* | *Ukraine* | *Trans-caucasia* | *Siberia* | *Far East. Rep.* | *Kirghiz Rep.* | *Turkes-tan* | *Waterways, Railways, Prisons* | *Total* |
|---|---|---|---|---|---|---|---|---|---|
| January to March. . | 9,378 | 416 | 52 | 1,115 | 31 | 385 | 237 | 308 | 11,922 |
| April to June. . . . | 5,702 | 301 | 18 | 1,026 | 57 | 282 | 72 | 155 | 7,613 |
| July to September. . | 1,610 | 146 | 41 | 257 | 27 | 62 | 14 | 122 | 2,425 |
| October to December. | 1,906 | 149* | 46 | 147 | 12 | — | — | 142 | 2,402 |
| TOTAL . . | 18,596 | 1,012* | 157 | 2,545 | 127 | 729 | 323 | 727 | 24,216 |

* Data for December missing.

*Spain.* — A marked increase of smallpox in this country occurred during the last six months of the year, beginning in July and August. The fatality rate cannot be determined as reports of cases are not available, but the disease seems to be of a malignant type.

DEATHS FROM SMALLPOX REPORTED IN SPAIN, BY MONTHS, 1923-1924.

| *Month* | 1923 | 1924 | *Month* | 1923 | 1924 |
|---|---|---|---|---|---|
| January. . . . . | 71 | 64 | *Brought forward* | 265 | 281 |
| February . . . . . | 68 | 34 | August . . . . . | 31 | 127 |
| March. . . . . | 35 | 34 | September. . . . . | 33 | 158 |
| April . . . . . | 29 | 14 | October. . . . . | 76 | 187 |
| May. . . . . | 21 | 22 | November. . . . . | 65 | 209 |
| June . . . . . | 20 | 38 | December . . . . . | 59 | 252 |
| July. . . . . | 21 | 75 | | | |
| *Carried forward* . | 265 | 281 | TOTAL . . | 529 | 1,214 |

*Kingdom of the Serbs, Croats and Slovenes.* — Smallpox incidence diminished considerably in 1924, especially during the latter months of the year, but the case fatality remained high. Most of the cases occurred in Bosnia and Herzegovina.

SMALLPOX CASES AND DEATHS REPORTED IN THE KINGDOM OF THE SERBS, CROATS AND SLOVENES, BY PROVINCES, 1922-1924.

| | 1922 | | 1923 | | 1924 | |
|---|---|---|---|---|---|---|
| *Provinces* | *Cases* | *Deaths* | *Cases* | *Deaths* | *Cases* | *Deaths* |
| Serbia. . . . . | 409 | 117 | 175 | 43 | 41 | 6 |
| Croatia-Slavonia . . . . . | 81 | 12 | 378 | 0 | 5 | 1 |
| Slovenia. . . . . | 10 | 0 | 18 | 3 | 1 | 0 |
| Bosnia-Herzegovina . . . . . | 204 | 28 | 369 | 50 | 264 | 55 |
| Dalmatia . . . . . | 18 | 7 | 32 | 6 | 7 | 1 |
| Montenegro . . . . . | 0 | 0 | 4 | 0 | 1 | 0 |
| Voivodina . . . . . | 6 | 1 | 66 | 6 | 9 | 1 |
| TOTAL . . | 728 | 165 | 1,042 | 199 | 328 | 64 |

*Switzerland.* — Contrary to the experience in England and Wales, the mild form of smallpox prevailing in Switzerland declined markedly during 1924 and almost disappeared during the final months of the year. The cantons most affected in 1924 were Berne, Lucerne, Argovia and Zurich.

CASES OF SMALLPOX REPORTED IN SWITZERLAND BY CANTONS.

| *Cantons* | 1922 | 1923 | 1924 | *Cantons* | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| Zurich . . . . . | 557 | 242 | 79 | *Brought forward* | 1,037 | 1,857 | 1,094 |
| Berne . . . . . | 400 | 1,314 | 685 | Saint-Gall. . . . . | 29 | 55 | 8 |
| Lucerne . . . . . | 14 | 139 | 258 | Grisons . . . . . | 1 | 0 | 0 |
| Uri . . . . . | 0 | 6 | 27 | Argovia. . . . . | 25 | 147 | 94 |
| Schwyz . . . . . | 10 | 2 | 13 | Thurgovia. . . . . | 56 | 60 | 3 |
| Glaris . . . . . | 21 | 0 | 0 | Tessin . . . . . | 5 | 2 | 0 |
| Zoug . . . . . | 2 | 5 | 12 | Vaud . . . . . | 0 | 5 | 3 |
| Soleure . . . . . | 0 | 41 | 9 | Obwalden . . . . . | 0 | 0 | 21 |
| Bâle-Ville . . . . . | 3 | 34 | 5 | Nidwalden . . . . . | 0 | 0 | 1 |
| Bâle-Campagne. . . . . | 30 | 29 | 6 | Fribourg . . . . . | 0 | 0 | 7 |
| Appenzell . . . . . | 0 | 45 | 0 | Neuchâtel. . . . . | 0 | 0 | 3 |
| *Carried forward* . | 1,037 | 1,857 | 1,094 | TOTAL . . | 1,153 | 2,126 | 1,234 |

The following table, giving the seasonal distribution by months, shows the almost complete disappearance of smallpox in Switzerland during the last quarter of 1924, at which time of the year an increase may ordinarily be expected.

CASES OF SMALLPOX REPORTED IN SWITZERLAND, BY MONTHS, IN 1924.

| *Month* | *Cases* | *Month* | *Cases* |
|---|---|---|---|
| January | 334 | *Brought forward* | 1,126 |
| February | 275 | August | 26 |
| March | 185 | September | 40 |
| April | 126 | October | 21 |
| May | 112 | November | 11 |
| June | 64 | December | 10 |
| July | 30 | | |
| *Carried forward* | 1,126 | TOTAL | 1,234 |

*Turkey in Europe.* — Only 16 cases of smallpox were reported during 1924 in Constantinople, where a serious epidemic had occurred in 1923 during the refugee movements — 2,504 cases and 750 deaths being reported that year.

## DYSENTERY

Dysentery notifications are less significant in tropical and semi-tropical countries than in Europe, as they include, without differentiation, a group of intestinal diseases of varied etiology. It is certain, furthermore, that approximately complete reporting of dysentery cases is impossible to obtain in most of these countries. In Europe, on the other hand, bacillary dysentery only is of practical importance.

Reports on cases of dysentery have been received from the following countries outside Europe:

| *Country* | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| *Africa:* | | | | | | | |
| Algeria | Cases | 25 | 12 | 41 | 118 | 306 | 139 |
| Basutoland | Cases | — | — | 187 | 89 | 56 | 112 |
| | Deaths | — | — | 14 | 2 | 1 | 0 |
| Mauritius | Deaths | 1,026 | 499 | 497 | 496 | 318 | 334 |
| Nyasaland | Cases | — | 476 | 329 | 329 | 1,122 | — |
| Northern Rhodesia | Cases | — | — | — | — | 33 | 58 |
| | Deaths | — | — | — | — | 6 | 6 |
| Sierra Leone | Cases | — | — | — | — | 115 | 108 |
| Tunisia | Cases | — | — | — | — | 78 | 108 |
| Zanzibar | Deaths | 14 | 9 | 1 | 2 | — | — |
| *America:* | | | | | | | |
| Brazil: Rio de Janeiro | Deaths | 287 | 209 | 247 | 383 | 275 | 141 |
| Sao Paulo | Deaths | 483 | 627 | 822 | 852 | — | — |
| Dominican Republic | Cases | — | — | — | — | — | 897 |
| | Deaths | — | — | — | — | — | 385 |
| Grenada | Cases | — | — | — | — | 733 | 725 |
| | Deaths | — | 99 | 109 | 83 | — | — |
| British Guiana | Cases | — | — | — | — | 1,111 | 907 |
| | Deaths | 385 | 246 | 301 | 300 | 89 | 80 |
| Haiti | Deaths | — | — | — | — | — | 351 |
| Mexico | Deaths | — | — | — | — | — | 1,917 |
| Panama Canal Zone | Cases | — | — | 26 | 55 | 66 | 70 |
| St. Lucia | Cases | — | — | — | 20 | 36 | 48 |
| St. Vincent | Cases | — | — | 419 | 447 | 461 | 189 |
| | Deaths | — | — | 37 | 29 | 13 | 13 |
| United States (27 States) | Cases | — | — | — | — | 16,954 | 2,309 |

DYSENTERY OUTSIDE EUROPE *(continued)*.

| *Country* | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| *Asia:* | | | | | | | |
| Aden | Cases | — | — | — | — | 12 | 22 |
| | Deaths | — | — | — | — | 3 | 11 |
| Ceylon | Cases | — | 4,790 | 5,518 | 3,446 | 5,717 | — |
| | Deaths | — | — | — | — | — | 15 |
| Cyprus | Cases | 538 | 769 | 827 | 798 | 570 | — |
| Iraq | Cases | — | — | — | — | 9 | 0 |
| | Deaths | — | — | — | — | 1 | 0 |
| Japan | Cases | 12,915 | 12,738 | 12,445 | 15,135 | 20,266 | 18,623 |
| | Deaths | 2,920 | 2,961 | 2,941 | 3,975 | 7,372 | 7,230 |
| Korea | Cases | — | 974 | 978 | 1,932 | 1,186 | 1,443 |
| | Deaths | — | 253 | 311 | 529 | 296 | 386 |
| Malay States (Unfederated): | | | | | | | |
| Johore | Deaths | — | — | — | 0 | 156 | 148 |
| Kedah | Deaths | — | — | — | — | 155 | 217 |
| Palestine | Cases | — | — | 100 | 129 | 234 | 724 |
| | Deaths | — | — | 6 | 11 | 16 | 27 |
| Shanghai | Cases | — | — | — | — | — | 148 |
| | Deaths | — | — | — | — | — | 11 |
| Singapore | Deaths | — | — | — | — | 737 | 689 |
| Straits Settlements | Deaths | 1,209 | 1,085 | 1,090 | 1,085 | 839 | 73 |
| Turkey | Cases | — | — | — | — | — | 152 |
| | Deaths | — | — | — | — | — | 23 |

## EUROPE.

Dysentery was more prevalent during 1924 in Russia and Poland than in the previous year, but less so in Germany. Its incidence diminished slightly in all countries in the Danube area and the Balkans. The information available for the last six years is shown below.

| *Country* | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| Austria | Cases | 6,903 | 4,212 | 4,733 | 1,196 | 791 | 535 |
| | Deaths | 1,719 | 837 | 778 | 220 | 120 | 43 |
| Belgium | Cases | 132 | 146 | 493 | 34 | 93 | 21 |
| Bulgaria | Cases | 793 | 698 | 569 | 740 | 489 | 389 |
| | Deaths | 167 | 167 | 103 | 122 | 106 | 76 |
| Czechoslovakia | Cases | 7,120 | 8,211 | 8,238 | 1,453 | 1,539 | 1,347 |
| | Deaths | 990 | 1,129 | 953 | 141 | 101 | 96 |
| Denmark | Cases | 5 | 2 | 2 | 3 | 2 | 0 |
| Danzig | Cases | 12 | 43 | 21 | 5 | 1 | 1 |
| | Deaths | 4 | 6 | 1 | 1 | 0 | 0 |
| England and Wales | Cases | 1,657 | 1,253 | 1,223 | 789 | 484 | 388 |
| Esthonia | Cases | 3,284 | 3,459 | 1,198 | 356 | 64 | 125 |
| Finland | Cases | 573 | 573 | 394 | 209 | 193 | 189 |
| France | Cases | 800 | 381 | 1,852 | 167 | 239 | 170 |
| Germany | Cases | — | — | 31,624 | 5,036 | 8,449 | 5,789 |
| Greece | Cases | — | — | — | — | — | 182[1] |
| | Deaths | — | — | — | — | — | 14[1] |
| Hungary | Cases | — | — | 5,230 | 2,455 | 4,321 | 3,699 |
| | Deaths | — | — | 485 | 332 | 694 | 521 |
| Northern Ireland | Cases | — | — | — | — | — | 1 |
| | Deaths | 9 | 2 | 2 | 3 | 3 | 0 |
| Irish Free State | Deaths | — | — | — | 9 | 15 | 6 |
| Italy | Cases | 4,973 | 2,666 | 2,201 | 1,197 | 1,118 | 1,062 |
| Latvia | Cases | — | 5,479 | 1,162 | 913 | 114 | 276 |
| Lithuania | Cases | — | 4,435 | 1,163 | 356 | 184 | 180 |
| | Deaths | — | 500 | 123 | 12 | 15 | 30 |

[1] Bacillary dysentery.

DYSENTERY IN EUROPE *(continued)*.

| *Country* | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| Netherlands | Cases | 16 | 11 | 20 | 14 | 7 | 38 |
| | Deaths | 5 | 3 | 9 | 11 | 4 | 5 |
| Norway (cities) | Cases | 60 | 237 | 168 | 92 | 24 | 36 |
| | Deaths | 0 | 2 | 1 | 0 | 0 | 0 |
| Poland | Cases | 7,734 | 31,020 | 32,944 | 14,344 | 5,314 | 10,492 |
| | Deaths | 1,226 | 5,168 | 4,988 | 1,739 | 853 | 1,533 |
| Roumania | Cases | 271 | 3,393 | 12,958 | 996 | 1,391 | 1,303 |
| | Deaths | 76 | 582 | 520 | 175 | 235 | 170 |
| European Russia (without Ukraine) | Cases | 137,169 | 324,389 | 164,802 | 249,757 | 147,307 | 202,949[1] |
| Ukraine | Cases | — | — | 55,291 | 50,138 | 25,816 | 43,136[2] |
| Saar Territory | Cases | — | — | 148 | 28 | 53 | 11 |
| Scotland | Cases | 217[3] | 276 | 108 | 42 | 60 | 39[4] |
| | Deaths | 32 | 18 | 22 | 8 | 5 | 9 |
| Kingdom of the Serbs, Croats and Slovenes | Cases | — | 11,138 | 13,279 | 2,878 | 3,977 | 3,110 |
| | Deaths | — | 1,906 | 2,392 | 371 | 637 | 345 |
| Sweden | Cases | 53 | 71 | 125 | 63 | 37 | 85 |
| Switzerland | Cases | 36 | 30 | 32 | 5 | 10 | 9 |

[1] Provisional figure.
[2] Eleven months only.
[3] Notifiable since August 1st, 1919.
[4] Information from 16 chief towns.

*Czechoslovakia.* — There was an increase of dysentery cases in Slovakia, while its incidence diminished elsewhere. The higher prevalence in Slovakia synchronised with the outbreak in the neighbouring districts of Galicia.

DYSENTERY CASES REPORTED IN CZECHOSLOVAKIA, 1922-1924.

| *Provinces* | 1922 | 1923 | 1924 |
|---|---|---|---|
| Bohemia | 467 | 336 | 116 |
| Moravia | 104 | 119 | 98 |
| Silesia | 77 | 113 | 93 |
| Slovakia | 699 | 738 | 875 |
| Ruthenia | 168 | 320 | 165 |

*Germany.* — The number of dysentery cases reported in Germany diminished from 8,449 in 1923 to 5,789 in 1924. There were 396 deaths due to this disease in 1924, as against 799 during the previous year, in 334 cities with a population of over 15,000. The seasonal maximum occurred, as is usual, in August; it is noteworthy that more cases were reported during each of the first seven months of 1924 than during the corresponding months of 1923, but the severe outbreaks which occurred in August and September of 1921 and 1923 did not recur in 1924.

*Hungary.* — Dysentery is widespread in Hungary and causes a considerable mortality. The seasonal maximum has occurred later each year since 1922; this has been the case also in Poland, Czechoslovakia and the Kingdom of the Serbs, Croats and Slovenes.

DYSENTERY CASES REPORTED IN HUNGARY, BY MONTHS, 1922-1924.

| *Month* | 1922 | 1923 | 1924 | *Month* | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| January | 46 | 38 | 71 | *Brought forward* | 702 | 565 | 734 |
| February | 32 | 35 | 44 | August | 940 | 778 | 612 |
| March | 47 | 33 | 45 | September | 510 | 1,284 | 664 |
| April | 44 | 59 | 43 | October | 206 | 928 | 1,220 |
| May | 43 | 33 | 53 | November | 67 | 579 | 403 |
| June | 76 | 169 | 153 | December | 32 | 187 | 66 |
| July | 414 | 198 | 325 | | | | |
| *Carried forward* | 702 | 565 | 734 | TOTAL | 2,457 | 4,321 | 3,699 |

*Poland.* — Twice as many dysentery cases were reported in Poland in 1924 as in 1923. There were two distinct outbreaks — the first beginning in July and culminating at the end of August; the second occurring in October.

DYSENTERY CASES AND DEATHS REPORTED IN POLAND, BY FOUR-WEEKLY PERIODS, 1922-1924.

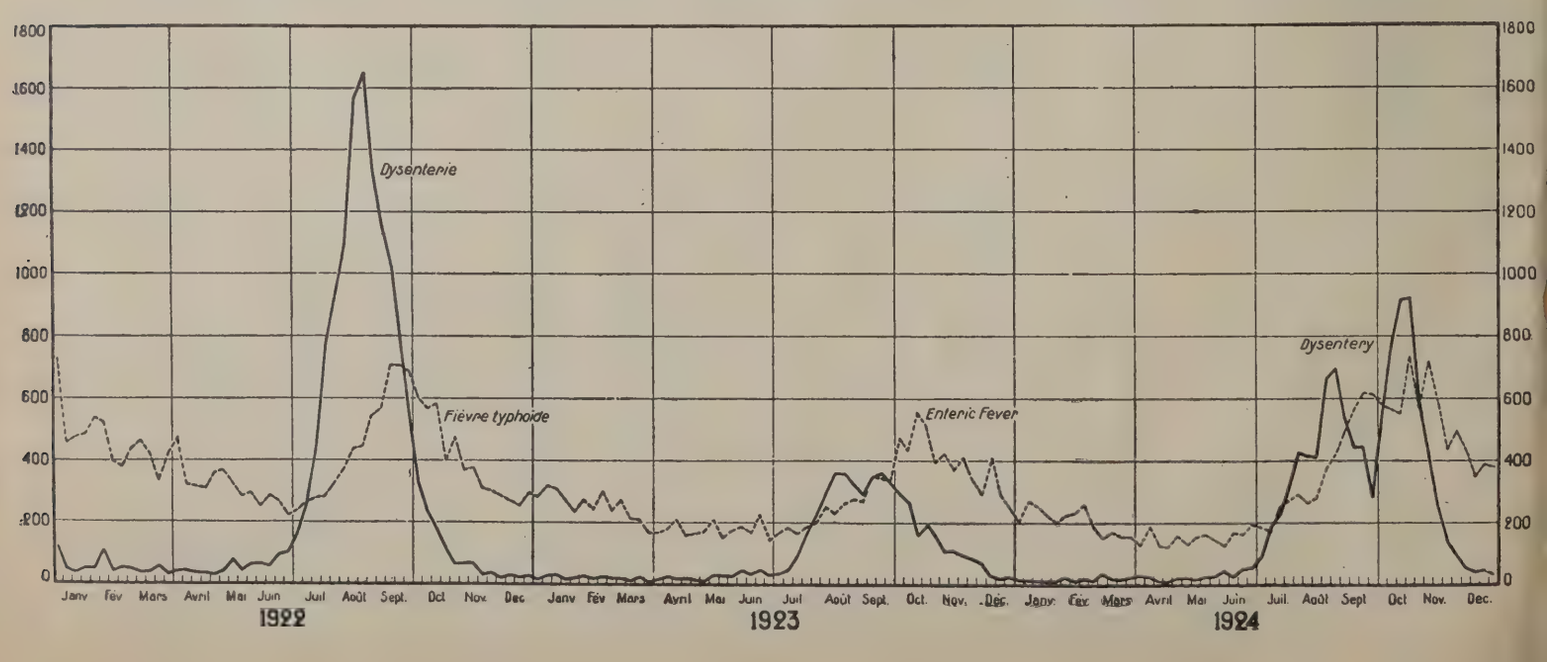
| *Four weeks ending about:* | 1922 | 1923 | | 1924 | |
|---|---|---|---|---|---|
| | *Cases* | *Cases* | *Deaths* | *Cases* | *Deaths* |
| January 26th . . . | 230 | 76 | 8 | 42 | 3 |
| February 23rd . . . | 234 | 77 | 12 | 58 | 5 |
| March 22nd . . . | 171 | 62 | 8 | 85 | 6 |
| April 19th . . . | 135 | 52 | 4 | 83 | 8 |
| May 17th . . . | 169 | 63 | 6 | 63 | 4 |
| June 14th . . . | 220 | 128 | 29 | 108 | 9 |
| July 12th . . . | 609 | 145 | 23 | 376 | 47 |
| August 9th . . . | 3,248 | 780 | 64 | 1,380 | 159 |
| September 6th . . . | 5,700 | 1,339 | 176 | 2,263 | 273 |
| October 4th . . . | 2,719 | 1,332 | 215 | 1,694 | 297 |
| November 1st . . . | 594 | 739 | 158 | 3,205 | 500 |
| November 29th . . . | 202 | 395 | 115 | 901 | 193 |
| December 31st . . . | 92 | 126 | 33 | 167 | 22 |
| TOTAL . . . | 14,323 | 5,314 | 853 | 10,427 | 1,524 |

The highest prevalence was reported, as usual, in Galicia, where the disease has been endemic for many years; the incidence was high also in the province of Posen, where it was formerly less frequent.

DYSENTERY CASES REPORTED IN POLAND, BY PROVINCES, IN 1924.

| *Provinces* | *Cases* | *Deaths* |
|---|---|---|
| *Eastern Zone:* | | |
| Bialystock . . . . . | 217 | 20 |
| Nowogrodek . . . . | 281 | 19 |
| Polesia . . . . . | 467 | 48 |
| Volhynia . . . . . | 433 | 25 |
| Tarnopol . . . . . | 792 | 108 |
| Vilna . . . . . | 167 | 17 |
| TOTAL . . . | 2,357 | 237 |
| *West Central Zone:* | | |
| Lodz . . . . . | 346 | 32 |
| Kielce . . . . . | 142 | 13 |
| Cracow . . . . . | 1,510 | 317 |
| TOTAL . . . . | 1,998 | 362 |
| *East Central Zone:* | | |
| Warsaw (city) . . . | 397 | 45 |
| Warsaw (district) . . | 130 | 19 |
| Lublin . . . . . | 191 | 21 |
| Lwow . . . . . | 1,605 | 304 |
| Stanislawof . . . . | 2,182 | 376 |
| TOTAL . . . | 4,505 | 765 |
| *Western Zone:* | | |
| Pomerania . . . . | 114 | 13 |
| Posen . . . . . | 1,078 | 114 |
| Teschen . . . . . | 375 | 33 |
| TOTAL . . . . | 1,572 | 160 |
| GRAND TOTAL . . . . | 10,427 | 1,524 |

CASES OF DYSENTERY AND TYPHOID FEVER REPORTED IN POLAND, BY MONTHS, FROM 1922 TO 1924.



*Russia.* — Dysentery was more prevalent in Russia in 1924 than during the two preceding years. The highest incidence was in Siberia and the Ural districts, though the increase was actually greatest in Northern and Western Russia, where the disease was formerly less common.

DYSENTERY CASES REPORTED IN RUSSIA, BY GEOGRAPHICAL DIVISIONS, 1923 AND 1924.

| *Geographical Divisions* | *Population* | 1923 | 1924 | *Rate per 100,000 pop. for 1924* |
|---|---|---|---|---|
| North-Eastern | 2,252,552 | 1,497 | 4,151 | 184.3 |
| North-Western | 5,320,270 | 3,843 | 11,594 | 217.9 |
| Western | 8,700,339 | 9,082 | 19,534 | 224.5 |
| Central Industrial | 17,982,853 | 22,532 | 44,284 | 246.2 |
| Central Black Earth | 10,457,676 | 20,483 | 29,070 | 277.9 |
| Middle Volga | 9,612,213 | 27,082 | 25,573 | 266.0 |
| Viatka-Vietluga | 3,317,984 | 8,968 | 11,237 | 339.6 |
| Ural | 8,030,577 | 24,350 | 33,444 | 416.4 |
| Lower Volga | 5,126,224 | 10,848 | 14,823 | 289.1 |
| South-Eastern | 8,119,062 | 9,656 | 9,239 | 113.8 |
| *Total for European Russia* (without Ukraine) | 78,919,750 | 138,341 | 202,949 | 257.1 |
| Ukraine | 27,628,381 | 25,816 | 43,136 | 156.1* |
| Transcaucasia | 5,674,603 | 2,592 | 4,849 | 85.5 |
| Siberia | 8,105,606 | 24,472 | 39,141 | 482.9 |
| Far Eastern Republic | 1,810,112 | 3,775 | 2,420 | 133.7 |
| Kirghiz Republic | 4,475,061 | 4,848 | 4,077 | 91.1** |
| Turkestan | 7,077,722 | 2,666 | 1,085 | 15.3** |
| Railways, Waterways, Prisons | | 12,352 | 7,299 | — |
| *Total for all Russia* | 134,853,752 | 214,862 | 304,956 | 226.1 |

* Data for eleven months only.
** Data for nine months only.

The seasonal maximum occurred in July and August and there was no fresh outbreak later in the year, as in the countries of East-Central Europe.

DYSENTERY CASES REPORTED IN RUSSIA, BY MONTHS, 1922-1924.

| *Month* | 1922 | 1923 | 1924 |
|---|---|---|---|
| January | 11,812 | 5,031 | 4,511 |
| February | 13,176 | 3,858 | 3,754 |
| March | 15,511 | 3,768 | 3,656 |
| April | 15,741 | 5,972 | 4,490 |
| May | 25,270 | 7,016 | 9,020 |
| June | 28,926 | 17,980 | 30,514 |
| July | 53,778 | 46,079 | 81,407 |
| August | 75,308 | 58,880 | 90,002 |
| September | 31,120 | 33,113 | 45,889 |
| October | 11,701 | 22,093 | 20,394 |
| November | 5,592 | 8,088 | 6,051 |
| December | 3,005 | 4,984 | 3,302 |

*Kingdom of the Serbs, Croats and Slovenes.* — Dysentery was less prevalent in this country in 1924 than in 1923. The highest number of cases occurred in Serbia and the lowest in Montenegro and Dalmatia. The seasonal maximum was in September, as in 1923.

## ENTERIC FEVER

The incidence of enteric fever has changed probably very little throughout the world during the last three years, and the steady decline of this disease which was observed during the last two decades before the war appears to have ceased for the time being. The following figures cannot be considered as complete for many countries, especially for those outside Europe, but suffice to indicate the general trend of the disease of recent years:

**Africa.**

| *Country* | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| Algeria | Cases | 353 | 820 | 1,288 | 751 | 712 | 750 |
| Egypt | Cases | 2,707 | 1,799 | 1,380 | 1,689 | 1,765 | 1,794 |
| | Deaths | 587 | 426 | 346 | 437 | 466 | 462 |
| Mauritius | Cases | 190 | 168 | 288 | 224 | 150 | — |
| | Deaths | 39 | 43 | 28 | 20 | 13 | — |
| Southern Rhodesia | Cases | — | — | 5 | 10 | 61 | 31 |
| | Deaths | — | — | — | 0 | 14 | 2 |
| Tunisia | Cases | — | — | — | — | 655 | 821 |
| Union of South Africa | Cases | 3,114 | 5,515 | 4,511 | 2,623[1] | 4,163[2] | [2]3,859 |

[1] January to June only. [2] Years ending June 30th, 1923 and 1924.

Cases in the *Union of South Africa* are more often reported among the white population han among the natives; during the year ending June 30th, 1924, 2,037 cases were reported among the former and 1,822 among the latter. A mild form of the disease is said to exist among the natives and is frequently not recognised; it has been found that „carriers", mostly natives handling milk or other food, are an important factor in urban outbreaks.

**America.**

| *Country* | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| Canada | Cases | — | — | — | — | — | 2,229 |
| | Deaths | — | — | — | — | — | 445 |
| Ontario | Cases | 492 | 713 | 725 | 576 | 1,665 | 849 |
| | Deaths | 145 | 182 | 184 | 127 | 212 | 81 |
| Cuba | Cases | 2,347 | 2,190 | 9,592 | 2,773 | 3,001 | 3,122 |
| Havana | Cases | 609 | 771 | 410 | 639 | 443 | 1,082 |
| | Deaths | 125 | 153 | 112 | 132 | 89 | 202 |
| British Guiana | Cases | 525 | 795 | 489 | 461 | 384 | 320 |
| | Deaths | 112 | 138 | 118 | 92 | 63 | 56 |
| Hawaii | Cases | 173 | 178 | 230 | 183 | 176 | 119 |
| Porto Rico | Cases | 189 | 225 | 429 | 301 | 870 | 810 |
| United States | Cases | 36,479[1] | 33,825[1] | 46,636[2] | 33,826[2] | 32,303[2] | [2]33,244 |
| Uruguay | Cases | 548 | 666 | 816 | 636 | 610 | 445 |
| | Deaths | 169 | 242 | 284 | 134 | 258 | 127 |

[1] Data for 35 States. [2] Data for 43 States.

Enteric fever was not more prevalent during 1924 in *Cuba* as a whole than it was during the two preceding years, but an outbreak occurred in July and August at Havana. The epidemic was most severe in Guines, one of its suburbs, where the infection proved to be water-carried, whereas, in the city proper, human carriers were found more instrumental in spreading the disease.

A slight increase in the number of cases of enteric fever in the *United States* in 1924 as compared with 1923 is indicated in the numbers reported in the various States, but the increase is too small to have much significance. The lowest incidence is found in the New England States, the highest in the South Central States. Those with high morbidity rates are Maryland, Virginia, Florida, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, West Virginia, New Mexico and Utah, representing six of the nine divisions into which the country is usually divided. The mortality rates of cities form a much more reliable basis of comparison than the case incidence and show conclusively that there was no change in the situation in 1924 as compared with 1923; that is, the death rates are the same in the aggregate and reached the low figure of 3.1 per 100,000 population, which may be contrasted with the rates of 19.6 in 1910, 8.7 in 1915 and 3.5 in 1920. Apparently a slowing-down is taking place in the decline and greater difficulty is experienced in reducing the rate than formerly, when marked improvement was effected by the purification of public water supplies. It appeared some years ago that the sources of enteric fever in the Northern and Southern States differed widely and that the substitution of a pure for a polluted public water supply caused no such decline in the enteric fever death rate in the south as occurred in the north. Some of the southern cities still show an excessive incidence of enteric fever.

The United States Public Health Service states that at least part of the excessive prevalence of this disease during the final months of 1924 in Chicago, New York and Washington was due to infection by oysters. This increase amounted to about 650 cases in New York, 100 in Chicago and 50 in Washington, all occurring in November and December. Careful investigation showed that the majority of the patients had eaten oysters from particular beds which constituted only a small percentage of the total oyster supply. The chronology of the outbreaks, the age and sex distribution together with the localisation of cases among the well-to-do classes confirmed the findings. Measures have been taken to prevent the recurrence of such epidemics. These three outbreaks, forming one epidemic, represent the largest number of cases ever traced to oysters.

**Asia.**

| *Country* | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| Ceylon | Deaths | — | 871 | 668 | 542 | 597 | — |
| Cyprus | Cases | 439 | 395 | 360 | 346 | 314 | — |
| Iraq | Cases | — | — | 87 | 104 | 147 | 136 |
| | Deaths | — | — | — | — | 31 | 29 |
| Japan | Cases | 62,141 | 61,659 | 56,424 | 59,540 | 57,943 | 63,714 |
| | Deaths | 11,992 | 11,177 | 11,436 | 12,061 | 12,059 | 13,270 |
| Korea | Cases | — | 2,360 | 2,835 | 4,273 | 3,151 | 3,574 |
| | Deaths | — | 445 | 518 | 820 | 539 | 583 |
| Palestine | Cases | — | — | 459 | 271 | 279 | 302 |
| | Deaths | — | — | 37 | 37 | 25 | 31 |
| Asiatic Russia: | | | | | | | |
| Far Eastern Republic | Cases | — | — | — | — | 2,798 | 1,366 |
| Kirghiz Republic | Cases | — | — | 8,563 | 10,274 | 1,801 | *949 |
| Siberia | Cases | — | — | 20,213 | 17,585 | 11,273 | 7,726 |
| Turkestan | Cases | — | — | 4,522 | 2,660 | 1,059 | *407 |
| Transcaucasia | Cases | — | — | — | 4,835 | 1,694 | 1,582 |

* For firstninemonths only.

The statistics for *Japan* make a distinction between typhoid and paratyphoid fevers; the numbers of typhoid cases have increased since 1921, while fewer cases of paratyphoid fever were reported during 1923 and 1924 than in preceding years. Para. B is the most frequent form.

Typhoid and Paratyphoid Cases and Deaths reported in Japan, 1919-1924.

| *Year* | *Typhoid Fever* | | *Paratyphoid Fevers* | |
|---|---|---|---|---|
| | *Cases* | *Deaths* | *Cases* | *Deaths* |
| 1919 | 54,706 | 11,156 | 7,435 | 836 |
| 1920 | 53,925 | 10,327 | 7,734 | 850 |
| 1921 | 50,133 | 10,634 | 6,291 | 802 |
| 1922 | 52,419 | 11,226 | 7,121 | 835 |
| 1923 | 52,628 | 11,369 | 5,315 | 690 |
| 1924 | 58,343 | 12,636 | 5,371 | 634 |

**Australasia.**

The number of enteric fever cases reported in Australia in 1924 was slightly lower than in the previous year. The disease is most prevalent in summer, that is, during the first quarter of the year.

Cases of Enteric Fever reported in Australia and New Zealand, 1919-1924.

| *States* | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|
| New South Wales | 857 | 1,016 | 949 | 706 | 873 | 760 |
| Victoria | 263 | 433 | 532 | 301 | 468 | 304 |
| Queensland | 724 | 731 | 468 | 400 | 452 | 358 |
| South Australia | 125 | 176 | 251 | 143 | 118 | 92 |
| West Australia | 236 | 367 | 391 | 244 | 251 | 220 |
| Tasmania | 163 | 214 | 305 | 139 | 91 | 82 |
| Total : Australia | 2,368 | 2,937 | 2,896 | 1,933 | 2,253 | 1,816 |
| New Zealand | 477 | 389 | 451 | 539 | 275 | 388 |

## Europe

Enteric fever has been more prevalent in most European countries during 1924 than 1923. A lower incidence than in the preceding year was reported only from *Denmark*, the *Netherlands*, *Belgium*, the *Irish Free State*, *Switzerland* and *Italy*, but in none of these cases was there a marked decrease as compared with 1922. Serious epidemics occurred in the Balkans, especially in ***Bulgaria.***

| *Country* | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| Austria | Cases | 3,944 | 2,761 | 4,288 | 2,303 | 2,043 | 2,093 |
| | Deaths | 536 | 315 | 404 | 240 | 154 | 127 |
| Belgium | Cases | 1,713 | 1,475 | 1,429 | 1,090 | 1,403 | 907 |
| Bulgaria | Cases | 4,192 | 3,080 | 1,915 | 2,867 | 2,799 | 7,127 |
| | Deaths | 541 | 321 | 222 | 301 | 326 | 816 |
| Czechoslovakia | Cases | 7,796 | 7,399 | 9,331 | 6,612 | 5,508 | 6,645 |
| | Deaths | 1,015 | 950 | 969 | 651 | 416 | 492 |
| Danzig | Cases | 49 | 244 | 179 | 74 | 130 | 144 |
| | Deaths | 5 | 12 | 19 | 11 | 13 | 10 |
| Denmark | Cases | 554 | 430 | 422 | 477 | 560 | 467 |
| England and Wales | Cases | 3,447 | 3,109 | 3,835 | 2,414 | 3,211 | 4,123 |
| | Deaths | 577 | 537 | 613 | 465 | 450 | — |
| Esthonia | Cases | 583 | 1,150 | 1,175 | 828 | 698 | 1,106 |
| Finland | Cases | 2,569 | 1,499 | 1,356 | 1,298 | 1,654 | 1,688 |
| France | Cases | 4,961 | 7,673 | 8,116 | 4,787 | 6,297 | 6,493 |
| Greece | Cases | — | — | — | — | — | 715 |
| | Deaths | — | — | — | — | — | 123 |
| Germany | Cases | — | — | 18,808 | 10,993 | 13,162 | 14,221 |
| Hungary | Cases | — | — | 6,880 | 5,477 | 4,880 | 6,994 |
| | Deaths | — | — | 612 | 665 | 669 | 907 |
| Northern Ireland | Cases | — | — | — | — | 168 | 127 |
| | Deaths | 57 | 65 | 37 | 26 | 20 | 25 |
| Irish Free State | Deaths | — | — | — | 96 | 142 | 98 |
| Italy | Cases | 23,400 | 32,487 | 35,527 | 25,316 | 27,626 | 24,454 |
| Latvia | Cases | — | 1,615 | 1,431 | 1,011 | 1,043 | 1,570 |
| Lithuania | Cases | — | 2,421 | 1,277 | 1,140 | 799 | 758 |
| | Deaths | — | 115 | 52 | 33 | 34 | 35 |
| Netherlands | Cases | 4,382 | 2,223 | 2,004 | 1,132 | 1,391 | 1,187 |
| | Deaths | 541 | 308 | 282 | 133 | 175 | 161 |
| Norway (cities) | Cases | 856 | 394 | 601 | 221 | 170 | 160 |
| | Deaths | 31 | 22 | 23 | 16 | 13 | 7 |
| Poland | Cases | 11,421 | 21,466 | 30,067 | 22,056 | 14,037 | 16,288 |
| | Deaths | 1,046 | 1,972 | 2,384 | 1,641 | 1,284 | 1,322 |
| Roumania | Cases | 3,766 | 6,512 | 6,777 | 5,954 | 5,273 | 7,864 |
| | Deaths | 480 | 731 | 833 | 627 | 561 | 910 |
| European Russia (without Ukraine) | Cases | 228,328 | 305,715 | 253,977 | 220,051 | 77,750 | 91,110 |
| Ukraine | Cases | — | — | 122,085 | 97,654 | 31,514 | [1] 33,546 |
| Saar Territory | Cases | — | — | 238 | 210 | 152 | 194 |
| | Deaths | — | — | 25 | 26 | 12 | 14 |
| Scotland | Cases | 634 | 743 | 595 | 439 | 794 | 205 |
| | Deaths | 84 | 100 | 89 | 67 | 76 | 40 |
| Kingdom of the Serbs, Croats and Slovenes | Cases | — | 3,851 | 4,617 | 3,906 | 3,549 | 6,403 |
| | Deaths | — | 444 | 614 | 504 | 493 | 716 |
| Spain | Deaths | 5,677 | 6,998 | 7,041 | 5,438 | 5,131 | 4,671 |
| Sweden | Cases | 3,827 | 1,266 | 1,123 | 896 | 808 | 1,404 |
| Switzerland | Cases | 360 | 336 | 451 | 342 | 456 | 301 |

[1] January–November only.

Distinction between typhoid and paratyphoid fevers is made in an increasing number of countries. In *Denmark* the paratyphoid cases are more concentrated in the summer or autumn months than the cases of typhoid fever.

TYPHOID AND PARATYPHOID FEVER CASES REPORTED IN DENMARK BY MONTHS. 1922-1924.*

| | 1922 | | 1923 | | 1924 | |
|---|---|---|---|---|---|---|
| *Month* | *Typhoid* | *Paratyphoid* | *Typhoid* | *Paratyphoid* | *Typhoid* | *Paratyphoid* |
| January | 9 | 0 | 9 | 3 | 23 | 4 |
| February | 6 | 1 | 17 | 0 | 20 | 8 |
| March | 6 | 21 | 10 | 1 | 8 | 4 |
| April | 17 | 10 | 10 | 3 | 12 | 6 |
| May | 20 | 56 | 16 | 4 | 16 | 0 |
| June | 12 | 36 | 14 | 7 | 9 | 4 |
| July | 35 | 34 | 45 | 20 | 33 | 9 |
| August | 33 | 10 | 54 | 137 | 47 | 8 |
| September | 28 | 15 | 50 | 87 | 54 | 50 |
| October | 11 | 36 | 39 | 24 | 42 | 47 |
| November | 50 | 11 | 27 | 4 | 16 | 16 |
| December | 19 | 4 | 18 | 5 | 24 | 7 |
| TOTAL | 246 | 234 | 309 | 295 | 304 | 163 |

* Provisional figures.

Paratyphoid infection is more prevalent than typhoid fever in *Finland*; there were 634 cases of typhoid fever and 1,054 of paratyphoid fever in 1924. In *Esthonia*, the contrary is the case — 937 typhoid cases as compared with 169 paratyphoid cases being reported during 1924. In *Switzerland* the respective figures were 257 and 44, and in *Bavaria*, where paratyphoid fever had been more prevalent than typhoid during 1923, the number of cases were 704 and 349 respectively.

In *Czechoslovakia*, 6,645 cases of typhoid and 175 of paratyphoid fevers (13 type A and 162 type B) were reported; the case mortality was 7.4 per cent for typhoid and 3.4 per cent for paratyphoid fevers. In the *Kingdom of the Serbs, Croats and Slovenes*, 5,999 cases of typhoid and 404 of paratyphoid fevers were reported, the case mortality being 11.6 per cent for the former and 4.7 per cent for the latter.

The most severe typhoid fever outbreak during 1924 occurred in *Bulgaria* and reached its maximum between October and December. The highest incidence was reported from the provinces of the Danubian plain, especially in Plevna (369 cases per 100,000 inhabitants), Varna (227) and Tirnova (200); typhoid fever is always prevalent in this district. Exceptionally heavy rainfalls in August are believed to have contributed to the widespread infection of water supplies. The arrangements for water supply are generally very primitive. The seasonal distribution of enteric fever during the last three years is shown below; it will be seen that the maximum incidence always occurs later in the year in Bulgaria than in countries further north. The seasonal fluctuation of the incidence is always much more marked in Bulgaria than in countries where the disease is less prevalent.

CASES OF ENTERIC FEVER REPORTED MONTHLY IN BULGARIA 1922-1924.

| *Month* | 1922 | 1923 | 1924 | *Month* | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| January | 199 | 204 | 244 | *Brought forward* | 448 | 737 | 686 |
| February | 77 | 135 | 162 | July | 109 | 82 | 134 |
| March | 67 | 132 | 110 | August | 222 | 163 | 264 |
| April | 28 | 112 | 66 | September | 426 | 332 | 606 |
| May | 37 | 91 | 32 | October | 520 | 464 | 1,883 |
| June | 40 | 63 | 72 | November | 570 | 522 | 2,122 |
| | | | | December | 577 | 499 | 1,432 |
| *Carried forward* | 448 | 737 | 686 | TOTAL | 2,872 | 2,799 | 7,127 |

A corresponding increase in enteric fever cases took place in the *Kingdom of the Serbs, Croats and Slovenes*, where 6,403 cases were reported in 1924 as against 3,549 in the previou year. This increase was largely confined to Serbia, where there were 2,201 cases in 1924 as against 555 in 1923.

The number of enteric fever cases reported in *Roumania* during 1924 was 7,864 as against 5,273 in the previous year; the increase occurred mainly in Transylvania, the Banat and neighbouring districts, where altogether 3,027 cases

were reported as against 1,447 in 1923. The area of high incidence extended northward into the eastern provinces of *Czechoslovakia*, while the prevalence was not above normal either in the western provinces of this country or in *Austria*. The number of cases reported in *Poland* and *Germany* was only slightly higher than in 1923.

Enteric fever was more prevalent in *Russia* in 1924 than in the preceding year, but less so than during the years 1919 to 1922. The increase was greatest in the central industrial region, where 32,971 cases were reported (184 per 100,000 inhabitants), as against 17,042 in 1923. As is usual, the maximum occurred earlier in the year in Northern and Central Russia than in the Ukraine.

ENTERIC FEVER CASES REPORTED IN RUSSIA, BY QUARTERS, DURING 1923 AND 1924.

| *Period* | *European Russia* | *Ukraine* | *Trans-caucasia* | *Siberia* | *Far-Eastern Republic* | *Kirghiz Republic* | *Turkestan* | *Waterways, railways and prisons* | *Total* |
|---|---|---|---|---|---|---|---|---|---|
| 1923: | | | | | | | | | |
| January-March | 23,929 | 8,484 | 538 | 3,117 | 425 | 874 | 255 | 2,091 | 39,713 |
| April-June | 12,958 | 5,046 | 350 | 1,748 | 288 | 147 | 220 | 924 | 21,681 |
| July-September | 20,560 | 5,969 | 671 | 2,606 | 1,232 | 579 | 475 | 1,356 | 33,448 |
| October-December | 20,303 | 12,015 | 135 | 3,802 | 853 | 201 | 109 | 1,652 | 39,070 |
| TOTAL | 77,750 | 31,514 | 1,694 | 11,273 | 2,798 | 1,801 | 1,059 | 6,023 | 133,912 |
| 1924: | | | | | | | | | |
| January-March | 16,623 | 6,419 | 265 | 2,637 | 248 | 238 | 146 | 886 | 27,462 |
| April-June | 10,831 | 3,345 | 271 | 1,430 | 196 | 160 | 57 | 335 | 16,625 |
| July-September | 37,218 | 7,934 | 475 | 2,132 | 727 | 551 | 204 | 1,258 | 50,499 |
| October-December | 26,438 | 15,848[1] | 571 | 1,527 | 195 | — | — | 1,484 | 46,063 |
| TOTAL | 91,110 | 33,546 | 1,582 | 7,726 | 1,366 | 949 | 407 | 3,963 | 140,649 |

[1] Data for December missing.

The reported case mortality for enteric fever is given below for the countries which possess data on both cases and deaths. It is possible that in some instances deaths may be more fully reported than cases, but the ratio would appear to be fairly accurate in most cases. It is practically the same in *Bulgaria* (11.4), *Roumania* (11.6) and the *Kingdom of the Serbs, Croats and Slovenes* (11.2), but considerably lower in *Austria* (6.1), *Czechoslovakia* (7.3) and *Poland* (8.1). The low figure in *Norway* (4.4) may be due to a predominance of paratyphoid infection. The ratio of deaths to cases in *Japan* and *Egypt* is apparently very high and this is confirmed by the fact that it has remained remarkably constant during recent years.

CASE MORTALITY (PER CENT) OF ENTERIC FEVER IN VARIOUS COUNTRIES, 1919-1924.

| *Country* | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|
| England and Wales | 16.7 | 17.3 | 16.0 | 19.3 | 14.0 | — |
| Austria | 13.6 | 11.4 | 9.4 | 10.4 | 7.5 | 6.1 |
| Bulgaria | 12.9 | 10.4 | 11.6 | 10.5 | 11.6 | 11.4 |
| Danzig | 10.2 | 4.9 | 10.6 | 14.9 | 10.0 | 6.9 |
| Scotland | 13.2 | 13.5 | 15.0 | 15.3 | 9.6 | — |
| Egypt | 21.7 | 23.7 | 25.1 | 25.9 | 26.4 | 25.8 |
| Hungary | — | — | 8.9 | 12.1 | 13.7 | 13.0 |
| Japan | 18.2 | 18.1 | 20.3 | 20.3 | 20.8 | 20.8 |
| New Zealand | 7.1 | 10.3 | 5.3 | 12.4 | 10.5 | 10.1 |
| Norway | 3.6 | 5.6 | 3.8 | 7.2 | 7.6 | 4.4 |
| Netherlands | 12.3 | 13.9 | 14.1 | 11.7 | 12.6 | 13.6 |
| Poland | 9.2 | 9.2 | 7.9 | 7.4 | 9.1 | 8.1 |
| Roumania | 12.7 | 11.2 | 12.3 | 10.5 | 10.6 | 11.6 |
| Kingdom of the Serbs, Croats and Slovenes | — | 11.5 | 13.3 | 12.9 | 13.9 | 11.2 |
| Czechoslovakia | 13.0 | 12.8 | 10.4 | 9.8 | 7.6 | 7.3 |

## MALARIA

The malaria problem in *Russia* in 1924 continued to be as serious as in 1923. The remarkable spread of malaria in South-Eastern Europe during the years following the World War was the subject of a report by the Malaria Commission of the Health Committee, which made a thorough investigation of the situation in Europe during 1923, The situation in the *Kingdom of the Serbs, Croats and Slovenes* has been seriously aggravated since the war, especially in Dalmatia. In *Greece* severe epidemics of malaria among the refugees spread to the indigenous population. In *Roumania* and *Bulgaria* also the situation became worse and threatened to get beyond control. The problem in Russia was further complicated by vast movements of the population due to famine causes. The rise in the incidence curves in the last few years are due, in the opinion of the Commission, to climatic conditions favouring anophelism, to mass movements of peoples, carrying with them new strains of plasmodia; in Russia famine and lack of quinine have also played an important rôle. In countries in which malaria is endemic reliable data are difficult to secure. In practically all tropical and sub-tropical countries malaria constitutes a serious public health problem, but notification is nowhere complete; the tables given in this report present only a partial picture of the true situation, and according to the best authorities these data must be accepted with considerable reserve. In Africa a few cases are reported from *Algeria* and *Tunisia* but reports are obviously incomplete. In America the most reliable data are obtainable for *Cuba*, *Panama* and the *United States*. In the first two countries the notifications for 1924 did not differ materially from those of 1923. In the *United States* 111,156 cases were reported in 26 States, and according to the information received the greatest prevalence of the disease was distributed as follows:

Cases of Malaria notified in certain of the United States of America, 1919–1924.

| *States* | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|
| Alabama | 2,517 | 756 | 793 | 1,445 | 6,849 | 4,280 |
| Arkansas | 5,015 | 8,022 | 6,360 | 4,111 | 5,980 | 4,039 |
| Florida | 1,895 | 1,862 | 994 | 971 | 1,050 | 933 |
| Georgia | 3,345 | 5,108 | 2,370 | 1,888 | 1,475 | 763 |
| Louisiana | 2,411 | 2,292 | 2,306 | 1,597 | 939 | 859 |
| Mississippi | 112,554 | 118,376 | 121,207 | 105,747 | 95,222 | 79,631 |
| Tennessee | — | — | — | — | — | 1,082 |
| Texas | — | 39,603 | 49,241 | 35,727 | 21,268 | 16,068 |
| Virginia | 4,440 | 4,575 | 3,806 | 3,689 | 3,006 | 2,268 |

According to these data, malaria is practically restricted to the South Atlantic and the East and South-Western Central States. Reports have not been received from North Carolina, where malaria is known to constitute a public health problem. A few cases are, of course, notified in other States, notably South Carolina, Oklahoma, Missouri and California. The maximum number of cases occurred in August. It is not likely that these figures give a true picture of the situation in North America.

## ASIA.

In Asia notification is probably very incomplete, and records for 1924 are available in only a few instances. In the *Straits Settlements* 3,119 cases were notified in 1924 as compared with 3,430 in 1923. From *Singapore* 1 089 cases were reported in 1924 and 1,367 cases in 1923. The most serious situation existed in *Asiatic Russia* and this has been taken into account in the discussion on Russia as a whole. A few cases are reported in *Australia* each year, principally in Western Australia.

## EUROPE.

The following table shows the European countries in which malaria is endemic and for which data ara available.

| *Country* | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| Czechoslovakia . . . . | Cases | 1;592 | 229 | 130 | 76 | 266 | 134 |
| | Deaths | — | 3 | 0 | 2 | 1 | 1 |
| Italy . . . . . | Cases | 247,084 | 227,747 | 267,589 | 234 656 | 188,937 | 250,896 |
| Poland . . . . . | Cases | 1,513 | 2,073 | 52,965 | 17,611 | 4,770 | 1,881 |
| | Deaths | 13 | 25 | 41 | 13 | 4 | 1 |
| European Russia (without Ukraine) . . . . | Cases | — | 546,896 | 779,229 | 1,647,205 | 3,864,742 | 3,178,878 |
| Ukraine . . . . . | Cases | — | — | — | 43,334 | 459,842 | 867,086 |
| Kingdom of the Serbs, Croats and Slovenes . | Cases | — | — | 28,750 | 14,600 | 21,414 | 48,962 |
| | Deaths | — | — | — | 161 | 153 | 150 |
| Spain . . . . . | Deaths | 1,937 | 2,044 | 1,918 | 1,527 | 1,262 | 1,195 |

Strong preventive measures are being taken in *Italy*, which may account in part at least for the increased number of notifications in 1924, as compared with the previous year. For *Spain*, reports of cases are not available but the number of deaths decreased slightly in 1924. Malaria in *Poland* has practically disappeared if reports are to be taken at their face value. In the *Kingdom of the Serbs, Croats and Slovenes*, the reported number of cases is double that of 1923, but there was no corresponding increase in mortality. The problem of malaria in *Czechoslovakia* is evidently of quite minor importance.

*Russia.* — The serious epidemic of malaria in Russia in 1923 continued almost unabated in 1924 and there was an alarming spread of the more serious forms of the disease (tropical) which had previously been restricted to the Caucasus and Turkestan, but which were already spreading to other districts in 1923 owing to mass movements of refugees. Whereas the total number of notifications in the whole of Russia exceeded five and a-half millions in 1923, the number in 1924 was nearly five millions, and these figures are evidently incomplete; Dr. Dobreitzer, of the Russian Health Commissariat, has reported over five million cases in the whole of Russia for the first ten months of the year alone. The rate for this period was 410 per 10,000 inhabitants, as compared with 400 per 10,000 inhabitants in 1923, the latter figure being about twice as high as the pre-war rate (216 per 100,000 inhabitants in 1913). One of the features of the 1924 epidemic was that malaria increased in the districts which were only slightly affected in 1923. In studying the figures for 1924 consideration must be given to the fact that malaria notifications were better carried out than in 1923, as the campaign became better organised. Notification is, however, still deficient in the rural districts, and Dr. Dobreitzer considers that, to obtain the actual figure, the number of cases reported should be doubled. The gravity of the malaria situation in Russia is aggravated by the fact that the tropical form has spread and appears to be firmly established in a number of districts and that famine conditions still exist and cause mass movements, which will carry new forms of plasmodia to districts where no immunity against these forms exists.

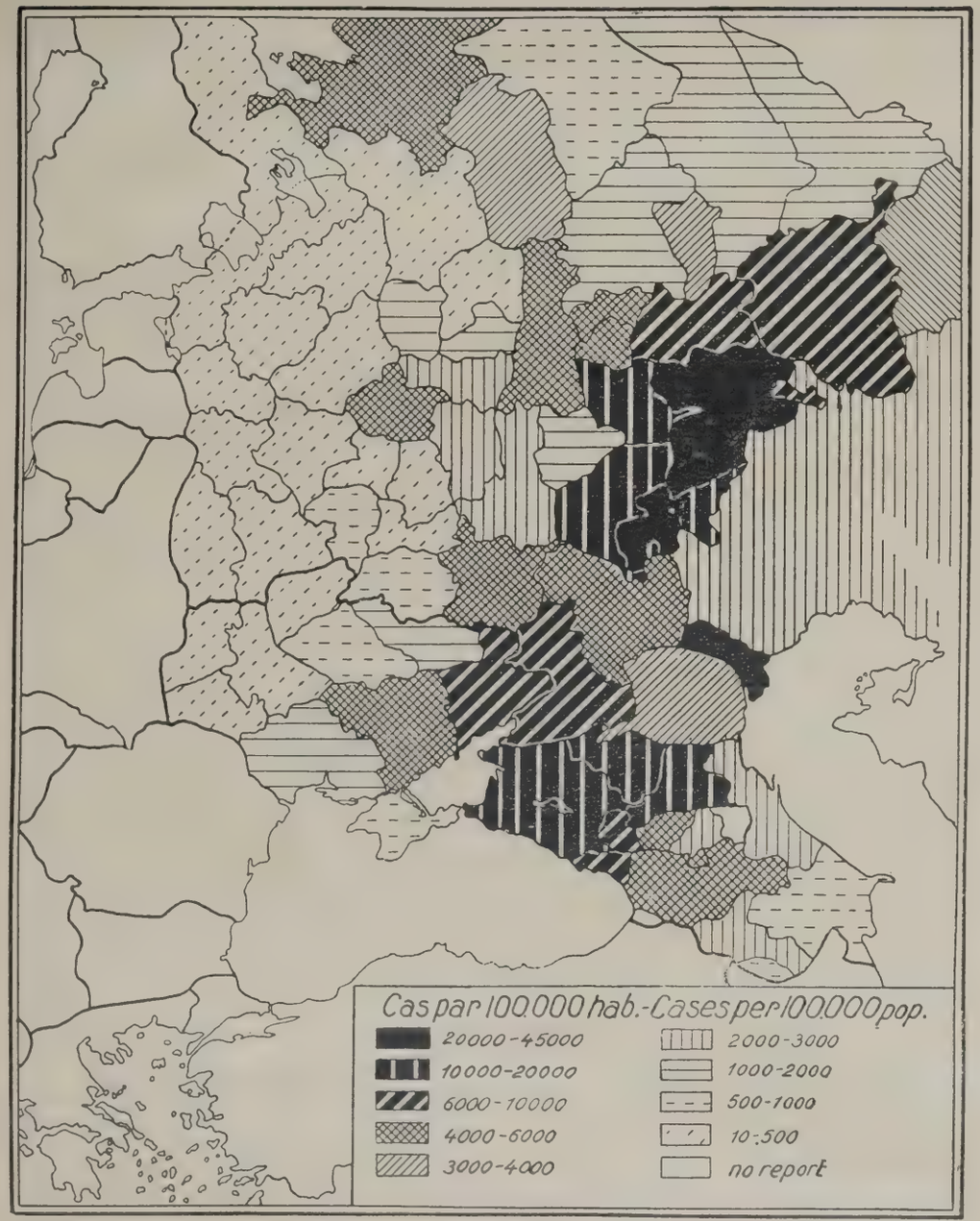
The incidence of malaria decreased in 1924 in all districts where it was seriously epidemic in the previous year, namely, in the North-Eastern District (48 cases per 10,000 inhabitants in 1924 as against 199 in 1923), Central Industrial District (100 as against 287), Middle Volga District (799 as against 1,119) and the Lower Volga District (1,082 as against 1,412). Decreases were also recorded in Turkestan (91 in 1924, 177 in 1923) and in Transcaucasia (303 as against 490). No change was observed in the following districts: North-Western (Karelia), Western (Pskoff), Central Agricultural, Northern Caucasus, Far Eastern and the Kirghiz Republic. Considerable increase occurred in the following districts: Urals (761 per 10,000 inhabitants in 1924 as against 379 in 1923), Siberia (528 as against 253), Ukraine (366 as against 159), Crimea (215 as against 97) and the Republic of White Russia (50 as against 24).

The increase in malaria in Russia in 1924 was confined to the first six months of the year, and especially to the first four. During the last six months of 1924 the figures were actually lower than those for 1923. In the Ukraine, the Urals and Siberia, however, the increase continued throughout the year. The maximum number of cases in 1922 occurred in September, in June in 1923 and in May in 1924, the latter being the month of maximum prevalence before the war. Exceptions to this rule occurred in Samara, Tsaritsyn and Astrakan. In Samara maxima occurred in May and September; in the greater part of Siberia and in the Kirghiz Republic the maximum occurred in June, and Northern Caucasus had two maxima, in May and August, with the highest point in August.

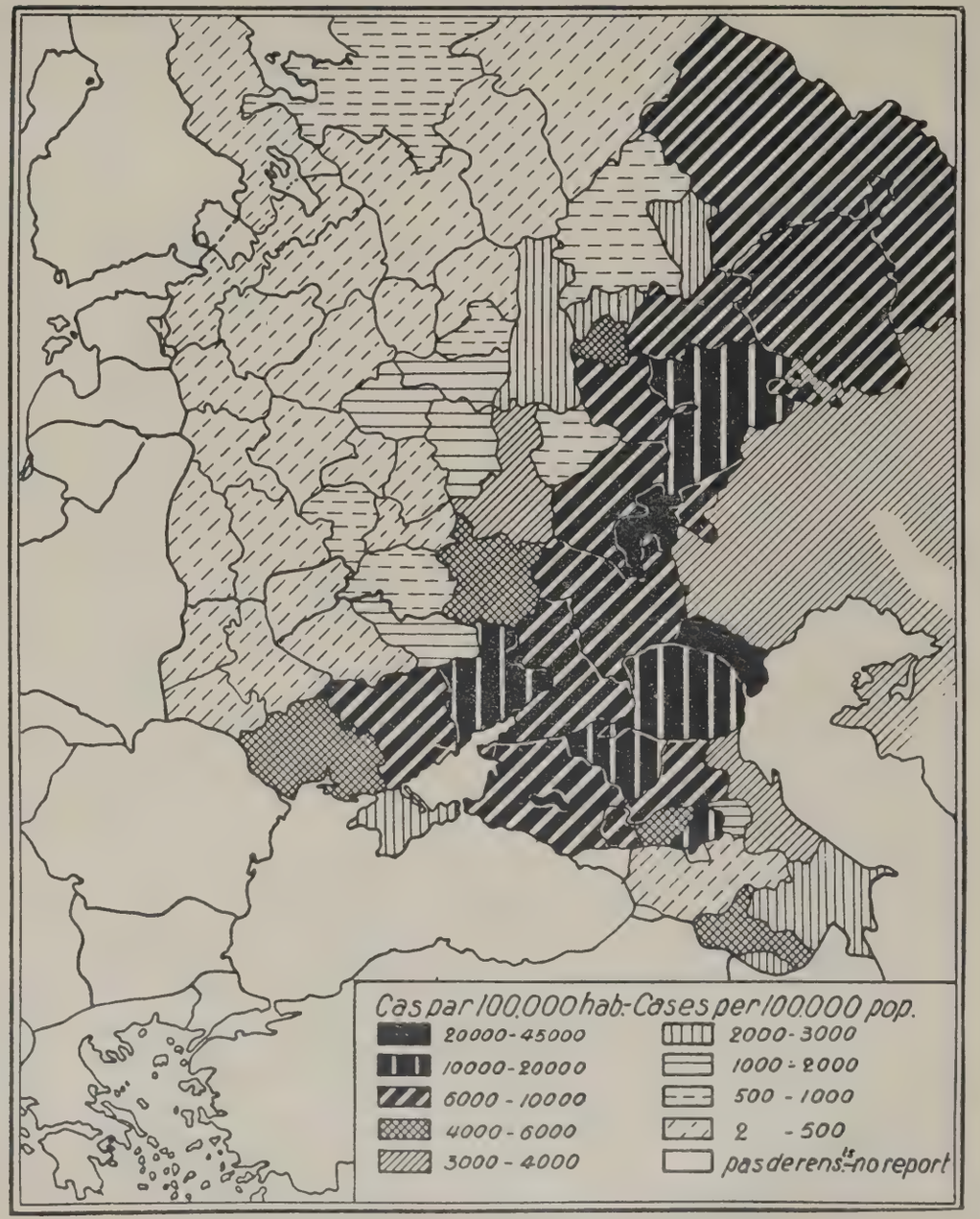
The highest mortality occurred in Siberia and Northern Caucasus, where it was estimated at 10 per cent, in Astrakan at 6 per cent and in Transcaucasia at 5 per cent.

The returns from malaria stations for 1924 show a high frequency of the tropical forms in all parts of the country. The benign tertian form is of course most frequent practically throughout Russia, but in some districts it was less prevalent than the tropical form, notably in Transcaucasia.

INCIDENCE OF MALARIA CASES REPORTED IN RUSSIA, BY GOVERNMENTS, IN 1923.




INCIDENCE OF MALARIA CASES REPORTED IN RUSSIA, BY GOVERNMENTS, IN 1924.



## Percentage Distribution of the Different Forms of Malaria in Russia during 1924.

| *Station* | *Tertian* | *Tropical* | *Quartan* | *Mixed* | *Undefined* |
|---|---|---|---|---|---|
| Tomsk (Siberia) | 98.7 | 0.5 | 0.6 | 0.2 | — |
| Novo-Nikolaievsk (Siberia) | 88.0 | 0.4 | 2.6 | 5.0 | 4.0 |
| Tambov (Central Black Earth) | 98.2 | 1.2 | 0.6 | — | — |
| Omsk (Siberia) | 98.6 | 1.3 | 0.1 | | |
| Voronege (Central Black Earth) | 95.5 | 1.4 | 0.4 | 0.2 | 2.1 |
| Riazan (Central Industrial) | 97.3 | 2.4 | 0.3 | — | — |
| Moscow (Central Industrial) | 87.6 | 3.2 | 0.05 | 0.3 | — |
| Rostov (South-Eastern Region) | 92.5 | 6.4 | 0.1 | 1.0 | — |
| Penza (Middle Volga) | 70.4 | 7.3 | 3.2 | 10.5 | 8.8 |
| Ufa (Bashkir) | 87.4 | 5.9 | 3.7 | 1.3 | 1.7 |
| Moscow City (Central Industrial) | 91.4 | 7.2 | 6.9 | 0.4 | — |
| Sukum (Transcaucasia) | 42.6 | 13.8 | 23.8 | 8.5 | 11.3 |
| Kazan (Tartar Republic) | 81.1 | 15.3 | 0.2 | 1.1 | 2.3 |
| Volsk (Lower Volga) | 59.8 | 16.2 | 9.3 | 1.4 | 13.1 |
| Adygei Rep. (South-Eastern) | 65.2 | 18.6 | 0.7 | 6.5 | 8.9 |
| Armenia Republic (Transcaucasia) | 45.6 | 19.4 | 28.5 | 2.5 | 4.0 |
| Saratov (Lower Volga) | 69.5 | 26.1 | 3.2 | 1.1 | — |
| Balachev " " | 42.9 | 36.0 | 19.8 | 1.2 | — |
| Astrakan " " | 19.1 | 53.5 | 0.1 | 1.4 | 25.9 |
| Tiflis (Transcaucasia) | 30.5 | 56.7 | 12.8 | — | — |
| Tsaritsyn (Lower Volga) | 2.4 | 5.1 | 65.5 | 5.1 | 21.9 |

Tropical forms of malaria were most common in Transcaucasia and the Volga districts.
The quartan form was practically restricted to the Volga district, Northern Caucasus and Transcaucasia.

## Number of Cases of Malaria reported in Russia, by Months and Regions, during 1923 and 1924.

| 1. *European Russia* | | *Jan.* | *Feb.* | *March* | *April* | *May* | *June* | *July* | *August* | *Sept.* | *Oct.* | *Nov.* | *Dec.* | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| North-Eastern Region | 1923 | 203 | 359 | 1,945 | 6,472 | 9,732 | 8,607 | 6,705 | 2,444 | 1,138 | 726 | 257 | 294 | 38,932 |
| | 1924 | 304 | 399 | 846 | 1,505 | 2,141 | 1,484 | 1,294 | 1,137 | 522 | 381 | 256 | 234 | 10,503 |
| North-Western Region | 1923 | 168 | 133 | 166 | 321 | 479 | 1,217 | 551 | 469 | 364 | 236 | 165 | 232 | 4,501 |
| | 1924 | 878 | 220 | 409 | 460 | 571 | 1,396 | 587 | 443 | 547 | 294 | 428 | 259 | 6,482 |
| Western Region | 1923 | 309 | 400 | 1,007 | 1,724 | 4,606 | 5,936 | 3,843 | 2,835 | 1,670 | 901 | 600 | 383 | 24,214 |
| | 1924 | 526 | 595 | 1,179 | 2,320 | 4,908 | 5,105 | 3.674 | 3,161 | 1,754 | 506 | 506 | 314 | 24,548 |
| Central Industrial | 1923 | 4,031 | 5,183 | 13,568 | 36,557 | 67,375 | 98,201 | 44,311 | 31,055 | 14,567 | 9,921 | 6,351 | 3,695 | 334,815 |
| | 1924 | 3,631 | 5,192 | 10,333 | 24,821 | 41,089 | 34,930 | 21,710 | 15,204 | 9,096 | 6,877 | 2,388 | 4,369 | 179,640 |
| Central Black Earth | 1923 | 3,465 | 3,545 | 9,300 | 25,279 | 56,641 | 57,908 | 46,805 | 24,784 | 18,156 | 11,299 | 7,185 | 4,322 | 273,680 |
| | 1924 | 4,075 | 5,656 | 17,513 | 43,431 | 79,966 | 59,890 | 38,906 | 26,544 | 21,074 | 12,453 | 6,831 | 7,654 | 323,993 |
| Middle Volga Region | 1923 | 34,828 | 44,337 | 78,886 | 129,112 | 172,230 | 158,284 | 152,878 | 150,921 | 106,916 | 68,021 | 50.458 | 37,000 | 1,183,871 |
| | 1924 | 39,869 | 53,134 | 79,608 | 105,312 | 134,521 | 88,563 | 73,676 | 64,346 | 61,688 | 37,701 | 4,206 | 28,979 | 771,603 |
| Viatka-Vietluga Region | 1923 | 1,199 | 1,134 | 2,271 | 5,561 | 11,836 | 16.732 | 11,718 | 7,805 | 4,851 | 1,657 | 987 | 541 | 66,292 |
| | 1924 | 505 | 470 | 1,435 | 7,387 | 14,048 | 9,547 | 5,134 | 2,751 | 1,962 | 1,502 | 572 | 226 | 45,539 |
| Ural Region | 1923 | 4,513 | 6,474 | 15,885 | 33,336 | 59,743 | 87,763 | 56,169 | 50,430 | 31,767 | 19,697 | [7,122 | 2,955 | 375,854 |
| | 1924 | 4,292 | 10,591 | 31,460 | 104,865 | 156,062 | 144,584 | 89,114 | 58,044 | 29,254 | 8,182 | — | — | 636,448 |
| Lower Volga Region | 1923 | 20,272 | 27,963 | 66,649 | 87,569 | 123,180 | 95,060 | 90,983 | 100,515 | 69,958 | 43,563 | 17,328 | 10,985 | 754,025 |
| | 1924 | 17,561 | 17,322 | 25,404 | 68,480 | 90,289 | 59,168 | 57,897 | 65,464 | 61,383 | 49,499 | 35,764 | 17,845 | 566,076 |
| South-Eastern Region | 1923 | 18,558 | 17,213 | 27,692 | 44,009 | 78,716 | 88,921 | 117,003 | 165,352 | 121,624 | 69,226 | 40,207 | 20,397 | 808,558 |
| | 1924 | 19.778 | 28,894 | 38,654 | 79,517 | 109,262 | 58,623 | 35,218 | 82,973 | 78,869 | 37,392 | 24,865 | 20,001 | 13,018 |
| European Russia | 1923 | 87,546 | 106,741 | 217,369 | 369.931 | 584,538 | 618,629 | 531,016 | 541,610 | 370,651 | 225,247 | 130,660 | 80,804 | 3,844,742 |
| | 1924 | 91,419 | 122,473 | 206,841 | 438,098 | 632,857 | 463,290 | 327,210 | 320,057 | 266,149 | 154,787 | 75,816 | 79,881 | 3,178,878 |
| Ukraine | 1923 | 2,101 | 2,511 | 5,600 | 23.385 | 65,218 | 88,023 | 76,032 | 73,923 | 58,132 | 37,945 | 18,054 | 8,918 | 459,842 |
| | 1924 | 5,957 | 9.310 | 42,835 | 111,470 | 219,072 | 161,126 | 125,605 | 85,531 | 62,363 | 29,521 | 14,296 | — | 867,086 |
| Transcaucasia | 1923 | 19,512 | 17,944 | 21,023 | 27,960 | 36,912 | 15,985 | 6,416 | 1,514 | 1,723 | 4,245 | — | — | 153,234 |
| | 1924 | 5,732 | 4,253 | 8,146 | 5,305 | 4,727 | 4,048 | 13,122 | 16,078 | 19,737 | 15,265 | 9,857 | 9,206 | 115,476 |
| Siberia | 1923 | 1,698 | 2,656 | 10,055 | 26,738 | 47,163 | 43,074 | 32,674 | 19,884 | 15,623 | 11,290 | 2,751 | 1,711 | 215,317 |
| | 1924 | 2,326 | 3,712 | 7,099 | 37,212 | 99,767 | 91,115 | 60,447 | 31,943 | 16,328 | 5,528 | 2,621 | 1,867 | 359,965 |
| Far-Eastern Republic | 1923 | 72 | 131 | 98 | 258 | 420 | 417 | 389 | 339 | 312 | 189 | — | 178 | 2,803 |
| | 1924 | 75 | 101 | 159 | 373 | 483 | 951 | 675 | 299 | 224 | 147 | — | — | 3,487 |
| Siberia and Far-Eastern Rep. | 1923 | 1,770 | 2,787 | 10,153 | 26,996 | 47,583 | 43,491 | 33,063 | 20,223 | 15,935 | 11,479 | 2,751 | 1,869 | 218,120 |
| | 1924 | 2,401 | 3,813 | 7,258 | 37,585 | 100,756 | 92,797 | 61,122 | 32,242 | 16,552 | 5,675 | 2,621 | 1,867 | 364,689 |
| Aut. Republic of Kirghiz | 1923 | 5,705 | 6,816 | 10,051 | 16,662 | 22,068 | 25,114 | 24,503 | 24,423 | 19,876 | 15,814 | — | — | 171,032 |
| | 1924 | 7,150 | 9,930 | — | 13,620 | 22,115 | 27,318 | 24,298 | 18,945 | 15,071 | — | — | — | 138,447 |
| Aut. Rep. of Turkestan | 1923 | 3,406 | 1,759 | 2,730 | 2,979 | 8,338 | 7,438 | 6,894 | 14,599 | 15,100 | 12,860 | 4,460 | — | 80,563 |
| | 1924 | 5,437 | 5,370 | 4,568 | 7,979 | 8,891 | — | 7,580 | — | — | — | — | — | 39,825 |
| Waterways, Railways and Prisons | 1923 | 17,820 | 18,651 | 32,759 | 57,360 | 83,977 | 75,056 | 71,030 | 91,750 | 61,732 | 52,523 | 31,995 | 14,670 | 609,323 |
| | 1924 | 13,508 | 12,042 | 14,146 | 47,180 | 52,664 | 32,026 | 33,628 | 30,104 | 20,263 | 16,581 | 10,164 | 6,203 | 288,509 |
| Total for Russia | 1923 | 137,860 | 157,209 | 299,865 | 525,272 | 818,634 | 873,736 | 748,954 | 768,042 | 543,149 | 360,113 | 187,920 | 106, 81 | 5,556,856 |
| | 1924 | 131,604 | 167,191 | 283,794 | 661,237 | 1,041,082 | 780,605 | 592,565 | 502,957 | 400,135 | 192,308 | 98,458 | 97,167 | 4,992,910 |

## MALTA FEVER

Malta fever, besides being endemic in many parts of the Mediterranean area, has been reported in various parts of Africa as far south as Southern Rhodesia and the Union of South Africa, in the West Indies and in some of the southern States of the United States. Reliable information on the number of cases is only available for a few countries.

The number of cases reported in *Malta* during the last five years is shown below. The seasonal maximum occurs between the months of May and August.

*Malta Fever Cases and Deaths reported in Malta and Gozo*, 1921-1924.

| | *Cases.* | | | |
|---|---|---|---|---|
| *Year* | *Malta* | *Gozo* | *Total* | *Deaths* |
| 1920 * | 624 | 21 | 645 | 22 |
| 1921 * | 673 | 61 | 734 | 27 |
| 1922 | 984 | 118 | 1,102 | 59 |
| 1923 | 992 | 34 | 1,026 | 39 |
| 1924 | — | — | 956 | — |

* Fiscal year April 1st to March 31st.

In *France* the disease occurs on the Mediterranean littoral and in Corsica. The highest number of cases have been reported from the departments of Gard, Bouches du Rhône and Basses Alpes. There were altogether 412 cases in 1924 as against 265 the previous year.

In *Tunisia* 81 cases were reported in 1924 as against 69 in 1923, in *Algeria* 5 in 1924 and 9 in 1923. Statistics are not available for other Mediterranean countries.

Malta fever cases were reported in 1922 from *Kenya* and *Southern Rhodesia*, in 1923 from *Uganda*, *Tanganyika* and *Southern Rhodesia*. From 20 to 40 cases have been reported during each of the last five years in the *Union of South Africa*, but it is believed that many cases escape notification.

## INFLUENZA

The great influenza pandemic of 1918-1919 has been followed, after an interval of some years, by recrudescences of varying intensity. The most important of these outbreaks so far is the one which occurred during the winter of 1921-1922. The recrudescence of influenza which occurred in the first quarter of 1924 was most marked in Western Europe and was less severe than that of 1921-1922.

Statistics of influenza cases and deaths are never very reliable owing to the great variation of types and complications which characterise this disease ; great caution should be observed in drawing any conclusions as to the actual prevalence of influenza in the different countries. The data given below merely indicate the annual fluctuations in those countries for which information is available.

| *Country.* | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| Algeria | Cases | 1,166 | 288 | 204 | 944 | 411 | 181 |
| British Guiana | Deaths | 3,381 | 163 | 229 | 105 | 77 | 28 |
| Denmark | Cases | 236,215 | 175,736 | 20,153 | 237,635 | 79,648 | 72,507 |
| Hawaii | Cases | 12,292 | 17,843 | 786 | 788 | 2,455 | 471 |
| New Zealand | Deaths | — | 480 | 105 | 66 | 222 | 28 |
| Norway (cities) | Cases | 25,920 | 15,980 | 5,419 | 51,747 | 23,784 | 10,353 |
| Palestine | Cases | — | — | 2,381 | 209 | 275 | 861 |
| | Deaths | — | — | 196 | 14 | 15 | 26 |
| Northern Rhodesia | Cases | — | — | — | — | 1,963 | 2,364 |
| | Deaths | — | — | — | — | 86 | 223 |
| Asiatic Russia | Cases | — | — | — | — | 145,909 | 269,280 |
| Europ. Russia (without Ukraine) | Cases | — | — | — | 524,032 | 755,563 | 1,052,252 |
| Spain | Deaths | 21,094 | 17,841 | 5,924 | 8,068 | 8,401 | 7,030 |
| Sweden | Cases | 210,000 | 65,194 | 20,569 | 92,671 | 18,032 | 8,676 |
| Switzerland | Cases | 86,058 | 139,809 | 2,058 | 60,295 | 2,150 | 30,262 |
| United States | Cases | 814,149 | 283,928 | 37,721 | 328,539 | 366,118 | 80,998 |
| (Number of States) | | (36) | (42) | (30) | (41) | (46) | (44) |

Seasonal variations of influenza can best be shown by the mortality statistics given below for a number of cities in various parts of the world:

DEATHS FROM INFLUENZA IN VARIOUS CITIES, BY MONTHS OR FOUR-WEEKLY PERIODS.

| Cities | Total 1922 | Total 1923 | Total 1924 | 1924 Jan. | Feb. | March | April | May | June | July | August | Sept. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *America.* | | | | | | | | | | | | | | | |
| Buenos Ayres | — | 268 | 237* | 6 | 2 | 6 | 10 | 19 | 22 | 18 | 43 | 69 | 42 | — | — |
| La Paz | — | — | 18* | 3 | 0 | 0 | 0 | 5 | 0 | 3 | 7 | 0 | 0 | 0 | —* |
| Montivedeo | 13 | 54 | 13* | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 6 | 3 | 3 | — | — |
| *Europe.* | | | | | | | | | | | | | | | |
| Brussels | 69 | 34 | 87 | 16 | 17 | 23 | 5 | 4 | 3 | 4 | 1 | 3 | 2 | 2 | 7 |
| Budapest | — | 55 | 112 | 10 | 55 | 21 | 11 | 2 | 1 | 3 | 0 | 3 | 0 | 4 | 2 |
| Genoa | — | 78 | 46 | 2 | 21 | 5 | 2 | 2 | 0 | 1 | 0 | 0 | 1 | 1 | 11 |
| Madrid | 241 | 231 | 142* | 51 | 36 | 10 | 5 | 5 | 8 | 3 | 3 | 0 | 5 | — | 16 |
| Milan | 200 | 42 | 70 | 13 | 11 | 22 | 6 | 4 | 1 | 2 | 1 | 0 | 3 | 1 | 6 |
| Moscow | — | — | — | 26 | 28 | 21 | 19 | 13 | 17 | — | — | — | — | — | — |
| Paris | 517 | 169 | 316 | 185 | 50 | 23 | 10 | 4 | 1 | 2 | 1 | 1 | 2 | 6 | 31 |
| Prague | 58 | 59 | 50 | 3 | 6 | 8 | 10 | 4 | 1 | 2 | 2 | 1 | 3 | 7 | 3 |
| Rome | 432 | 188 | 173* | 26 | 35 | 66 | 25 | 13 | 7 | 1 | 0 | 0 | — | — | — |
| Toulon | — | 11* | 20 | 9 | 5 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 3 |
| Venice | 50 | 41 | 23 | 4 | 5 | 4 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 |

| Cities | | | | 30th Dec. to 26th Jan. | 27th Jan. to 23rd Feb. | 24th Feb. to 22nd March | 23rd March to 19th April | 20th April to 17th May | 18th May to 14th June | 15th June to 12th July | 13th July to 9th Aug. | 10th Aug. to 6th Sept. | 7th Sept. to 4th Oct. | 5th Oct. to 1st Nov. | 2nd to 29th Nov. | 30th Nov. to 27th Dec. | 28th Dec. to 3rd Jan. 1925 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *America.* | | | | | | | | | | | | | | | | | |
| Boston | 66 | 98 | 32 | 5 | 4 | 4 | 1 | 1 | 2 | 2 | 0 | 0 | 0 | 2 | 3 | 7 | 1 |
| Chicago | 281 | 430 | 189 | 23 | 22 | 32 | 28 | 15 | 12 | 4 | 2 | 4 | 5 | 10 | 10 | 17 | 5 |
| New Orleans | — | 161 | 132 | 13 | 30 | 25 | 16 | 4 | 1 | 0 | 1 | 2 | 4 | 4 | 15 | 14 | 3 |
| New York | 864 | 1,159 | 554 | 45 | 81 | 82 | 65 | 49 | 18 | 12 | 6 | 6 | 13 | 43 | 40 | 70 | 24 |
| San Francisco | 185 | 47 | 27 | 6 | 7 | 2 | 2 | 0 | 2 | 0 | 1 | 1 | 1 | 1 | 0 | 2 | 2 |
| *Asia.* | | | | | | | | | | | | | | | | | |
| Bombay | 518 | 239 | 126 | 11 | 18 | 16 | 7 | 20 | 10 | 4 | 11 | 6 | 6 | 9 | 6 | 2 | 0 |
| Calcutta | 658 | 368 | 377 | 16 | 25 | 40 | 39 | 22 | 23 | 13 | 22 | 49 | 24 | 30 | 11 | 43 | 20 |
| Hong-Kong | 238 | 77 | 35 | 0 | 1 | 0 | 6 | 2 | 6 | 5 | 5 | 2 | 3 | 2 | 2 | 1 | — |
| Madras | 28 | 22 | 12 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 0 | 1 | 1 | 5 | 0 |
| Rangoon | — | 132 | 84 | 10 | 9 | 7 | 9 | 7 | 3 | 8 | 2 | 8 | 4 | 5 | 6 | 6 | 0 |
| *Europe.* | | | | | | | | | | | | | | | | | |
| 105 large towns of Great Britain | 10,435 | 4,146 | 8,789 | 580 | 2,110 | 2,674 | 1,558 | 553 | 191 | 93 | 69 | 69 | 85 | 138 | 233 | 336 | 100 |
| 46 German towns | 6,856 | 3,474 | 3,052 | 242 | 320 | 705 | 655 | 277 | 109 | 63 | 58 | 63 | 52 | 71 | 138 | 231 | 68 |
| 7 towns of Northern Ireland | 330 | 145 | 215 | 25 | 84 | 45 | 21 | 9 | 2 | 5 | 2 | 1 | 4 | 2 | 7 | 6 | 2 |
| 26 Swiss towns | 380 | 127 | 383 | 16 | 115 | 137 | 43 | 17 | 6 | 3 | 5 | 4 | 6 | 5 | 10 | 12 | 4 |
| Amsterdam | 284 | 59 | 33 | 9 | 9 | 3 | 5 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 3 | 1 |
| Berlin | 963 | 738 | 930 | 81 | 92 | 293 | 173 | 61 | 22 | 6 | 12 | 12 | 14 | 23 | 56 | 69 | 16 |
| Breslau | 327 | 201 | 168 | 20 | 17 | 24 | 29 | 15 | 11 | 7 | 5 | 4 | 4 | 6 | 5 | 17 | 4 |
| Cologne | 299 | 181 | 156 | 6 | 20 | 41 | 29 | 9 | 5 | 4 | 1 | 4 | 2 | 5 | 10 | 17 | 3 |
| Copenhagen | 193 | 71 | 98 | 7 | 10 | 34 | 27 | 15 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Dresden | 319 | 190 | 118 | 12 | 9 | 25 | 27 | 11 | 8 | 2 | 2 | 4 | 2 | 0 | 4 | 8 | 4 |
| Dublin | 149 | 31 | 299 | 102 | 115 | 27 | 12 | 14 | 5 | 2 | 1 | 0 | 0 | 2 | 5 | 5 | 9 |
| Glasgow | 796 | 63 | 423 | 9 | 40 | 172 | 80 | 19 | 18 | 11 | 6 | 3 | 6 | 6 | 9 | 33 | 11 |
| Hamburg | 364 | 119 | 130 | 9 | 25 | 21 | 28 | 14 | 7 | 5 | 2 | 2 | 0 | 4 | 7 | 5 | 1 |
| Lille | 89 | 23 | 35 | 6 | 14 | 8 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 1 | 1 |
| London | 2,582 | 752 | 1,663 | 176 | 602 | 426 | 167 | 64 | 26 | 18 | 8 | 19 | 9 | 22 | 48 | 61 | 17 |
| Munich | 186 | 160 | 142 | 12 | 11 | 16 | 48 | 18 | 13 | 2 | 2 | 0 | 1 | 3 | 2 | 9 | 5 |
| Oslo (Christiania) | 94 | 48 | 22 | 1 | 4 | 11 | 2 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Stockholm | 168 | 7 | 74 | 2 | 47 | 16 | 5 | 1 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Strasburg | 80 | 15 | 42 | 2 | 16 | 15 | 1 | 5 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| Vienna | 282 | 80 | 81 | 5 | 8 | 17 | 18 | 3 | 6 | 3 | 1 | 3 | 1 | 4 | 4 | 6 | 2 |
| Warsaw | — | — | 176 | 5 | 6 | 3 | 3 | 9 | 6 | 5 | 9 | 29 | 27 | 28 | 30 | 11 | 5 |

* Figures incomplete.

Influenza was less prevalent in 1924 in the *United States* and other parts of North American than in 1923; no serious outbreaks have been reported from any country in the southern hemisphere. The incidence in Central and Southern Europe appears to have been about the same, while it was higher in Scandinavian countries. Mortality from influenza during 1924 in English and French cities was approximately twice that of the previous year, and in Scotch, Irish and Swiss cities even higher.

The epidemic started earliest in Paris, where mortality markedly increased from the beginning of December, the rise culminating in the middle of January. The maximum was reached in Ireland at the end of January, in London and Northern England by the middle of February, in the industrial centres of Lancashire by the middle of March and in Scotland at the end of March. The progress of the epidemic has been very irregular, the maxima for the different European cities occurring at different times within a period of three or four months, without showing a regular geographical movement. Persons of advanced age were most frequently attacked and there were no signs of a return to the age distribution which characterised the 1918 pandemic.

## ENCEPHALITIS LETHARGICA

Encephalitis lethargica was unusually prevalent in *Great Britain* and *Ireland* during 1924; small outbreaks occurred in *Italy*, *Sweden*, *Denmark* and *Russia*, while fewer cases were reported than in previous years in other European countries where the disease is notifiable. There were fewer cases than in 1923 in the *United States*.

| *Country* | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| | | | AFRICA. | | | | |
| Algeria | Cases | — | 20 | 11 | 13 | 7 | 4 |
| Union of South Africa | Cases | — | 25 | 33 | 6[a] | 13[b] | [c]13 |
| | | | AMERICA. | | | | |
| United States (31 States) | Cases | — | — | — | — | 2,387 | 1,296 |
| Uruguay | Cases | — | 69 | 5 | 12 | 2 | 9 |
| | Deaths | — | 53 | 9 | 11 | 3 | 14 |
| | | | AUSTRALASIA. | | | | |
| Australia | Cases | — | — | — | — | 28 | 17 |
| New Zealand | Cases | 90 | 42 | 23 | 36 | 41 | 29 |
| | Deaths | 29 | 19 | 14 | 13 | 11 | 10 |
| | | | EUROPE. | | | | |
| Belgium | Cases | — | 17 | 243 | 26 | 27 | 22 |
| Czechoslovakia | Cases | — | — | — | 150 | 366 | 97 |
| | Deaths | — | — | — | 59 | 119 | 32 |
| Denmark | Cases | 26 | 223 | 138 | 42 | 87 | 105 |
| England and Wales | Cases | 541 | 890 | 1,470 | 454 | 1,025 | 5,040 |
| | Deaths | 294 | 480 | 729 | 339 | 531 | — |
| Esthonia | Cases | — | — | 9 | 0 | 16 | 5 |
| Finland | Cases | — | 239[d] | 1,095 | 46 | 83 | 43 |
| Northern Ireland | Cases | — | — | — | — | 23 | 278 |
| | Deaths | — | 26 | 19 | 5 | 34 | 55 |
| Italy | Cases | — | — | 278 | 477 | 277 | 618 |
| Latvia | Cases | — | — | 6 | 4 | 0 | 3 |
| Lithuania | Cases | — | — | — | — | 72 | 8 |
| | Deaths | — | — | — | — | 8 | 1 |
| Norway (cities) | Cases | 11 | 38 | 55 | 7 | 10 | 10 |
| | Deaths | 3 | 9 | 13 | 3 | 1 | 2 |
| Poland | Cases | — | — | 85 | 121 | 329 | 89 |
| | Deaths | — | — | 43 | 27 | 59 | 34 |
| European Russia (without Ukraine) | Cases | — | — | — | — | 603 | 1,187 |
| Scotland | Cases | — | — | — | — | — | [e]628 |
| | Deaths | — | 91 | 61 | 45 | 125 | 181 |
| Sweden | Cases | — | 352 | 1,512 | 192 | 530 | 300 |
| Switzerland | Cases | — | 984 | 156 | 62 | 203 | 85 |
| Ukraine | Cases | — | — | — | — | 196 | [f]625 |

[a] January 1st to June 30th, 1922. [b] July 1st, 1922, to June 30th, 1923. [c] July 1st, 1923, to June 30th, 1924.
[d] Became notifiable on December 1st, 1920. [e] Data for 16 chief towns. [f] Data for December missing.

The maximum incidence this year occurred in most countries in the spring, instead of in the winter, as in former years. In *England and Wales* the maximum was reached in the middle of May, while in 1923 the highest number of cases were reported in March, and in 1921 in February. The epidemic did not reach its full height in *Scotland* until June. These epidemics did not as a rule coincide with the influenza outbreaks but — while in some cases preceding them, as in Manchester — came later in most localities; in the case of London, after an interval of three months.

The epidemic in Great Britain is the most serious on record if the Japanese epidemic, referred to later, is to be excluded. At least three times as many cases occurred as in 1921. The case mortality, on the other hand, was lower than during the earlier outbreaks and rarely exceeded 20 per cent, while in former years it was nearly 50 per cent. The original oculo-lethargic type was less common and abortive attacks were frequent.

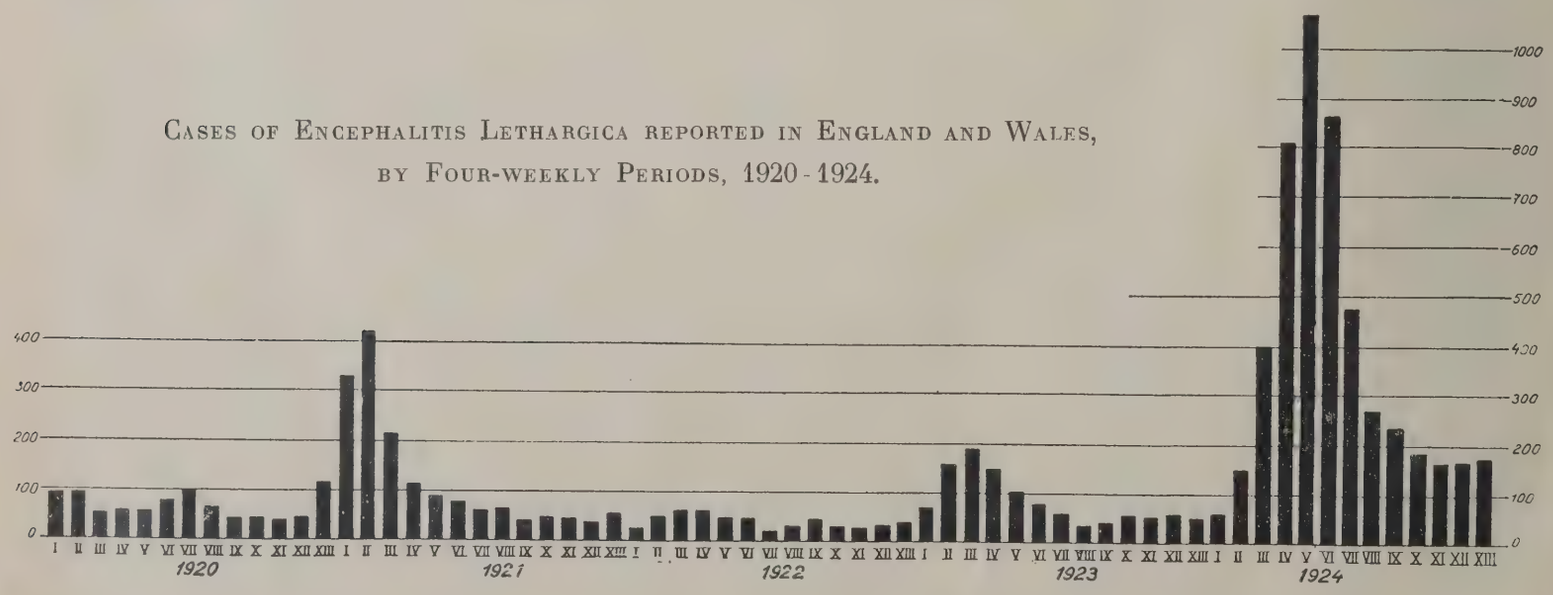
The seasonal incidence of encephalitis cases reported in various European countries is shown below.

CASES OF AND DEATHS FROM ENCEPHALITIS LETHARGICA IN VARIOUS EUROPEAN COUNTRIES DURING 1924, BY MONTHS OR FOUR-WEEKLY PERIODS.

| | | Months. | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Country.* | | *Jan.* | *Feb.* | *March* | *April* | *May* | *June* | *July* | *Aug.* | *Sept.* | *Oct* | *Nov.* | *Dec.* | *Total* |
| Belgium . . . . . | Cases | 2 | 0 | 2 | 1 | 1 | 9 | 2 | 0 | 2 | 1 | 0 | 2 | 22 |
| Czechoslovakia . . . | Cases | 7 | 9 | 22 | 25 | 8 | 5 | 8 | 0 | 3 | 0 | 6 | 4 | 97 |
| | Deaths | 2 | 1 | 9 | 6 | 1 | 2 | 4 | 0 | 2 | 0 | 3 | 2 | 32 |
| Denmark . . . . . | Cases | 3 | 4 | 10 | 14 | 17 | 8 | 6 | 7 | 5 | 6 | 10 | 15 | 105 |
| Finland . . . . . | Cases | 3 | 5 | 6 | 6 | 3 | 3 | 1 | 2 | 2 | 2 | 2 | 8 | 43 |
| Netherlands. . . . . | Cases | 0 | 3 | 4 | 4 | 3 | 3 | 2 | 3 | 5 | 0 | 0 | 8 | 35 |
| | Deaths | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 7 | 2 | 2 | 2 | 14 |
| Sweden. . . . . | Cases | 32 | 63 | 43 | 25 | 19 | 11 | 14 | 22 | 21 | 20 | 13 | 17 | 300 |

| | | Four weeks ending: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Country* | | *Jan.* 26 | *Feb.* 23 | *March* 22 | *April* 19 | *May* 17 | *June* 14 | *July* 12 | *Aug.* 9 | *Sept.* 6 | *Oct.* 4 | *Nov.* 1 | *Nov.* 29 | *Dec.* 27 | *Total* |
| England and Wales . . . | Cases | 60 | 148 | 386 | 806 | 1,071 | 858 | 468 | 260 | 228 | 191 | 177 | 172 | 173 | 4,998 |
| London . . | Cases | 6 | 8 | 18 | 93 | 156 | 113 | 77 | 38 | 24 | 27 | 17 | 21 | 13 | 511 |
| | Deaths | 3 | 2 | 8 | 13 | 20 | 30 | 16 | 10 | 5 | 7 | 4 | 9 | 6 | 113 |
| Italy . . . . | Cases | 28 | 52 | 150 | 151 | 72 | 37 | 18 | 21 | 13 | 15 | 12 | 22 | 27 | 618 |
| Saar Territory. | Cases | 2 | 1 | 3 | 5 | 3 | 1 | 2 | 3 | 4 | 0 | 2 | 1 | 1 | 28 |
| | Deaths | 0 | 0 | 0 | 1 | 2 | 1 | 2 | 0 | 3 | 0 | 2 | 1 | 0 | 12 |
| Scotland (16 cities) . | Cases | 3 | 2 | 5 | 8 | 95 | 232 | 144 | 46 | 33 | 20 | 10 | 22 | 13 | 633 |

CASES OF ENCEPHALITIS LETHARGICA REPORTED IN ENGLAND AND WALES, BY FOUR-WEEKLY PERIODS, 1920-1924.

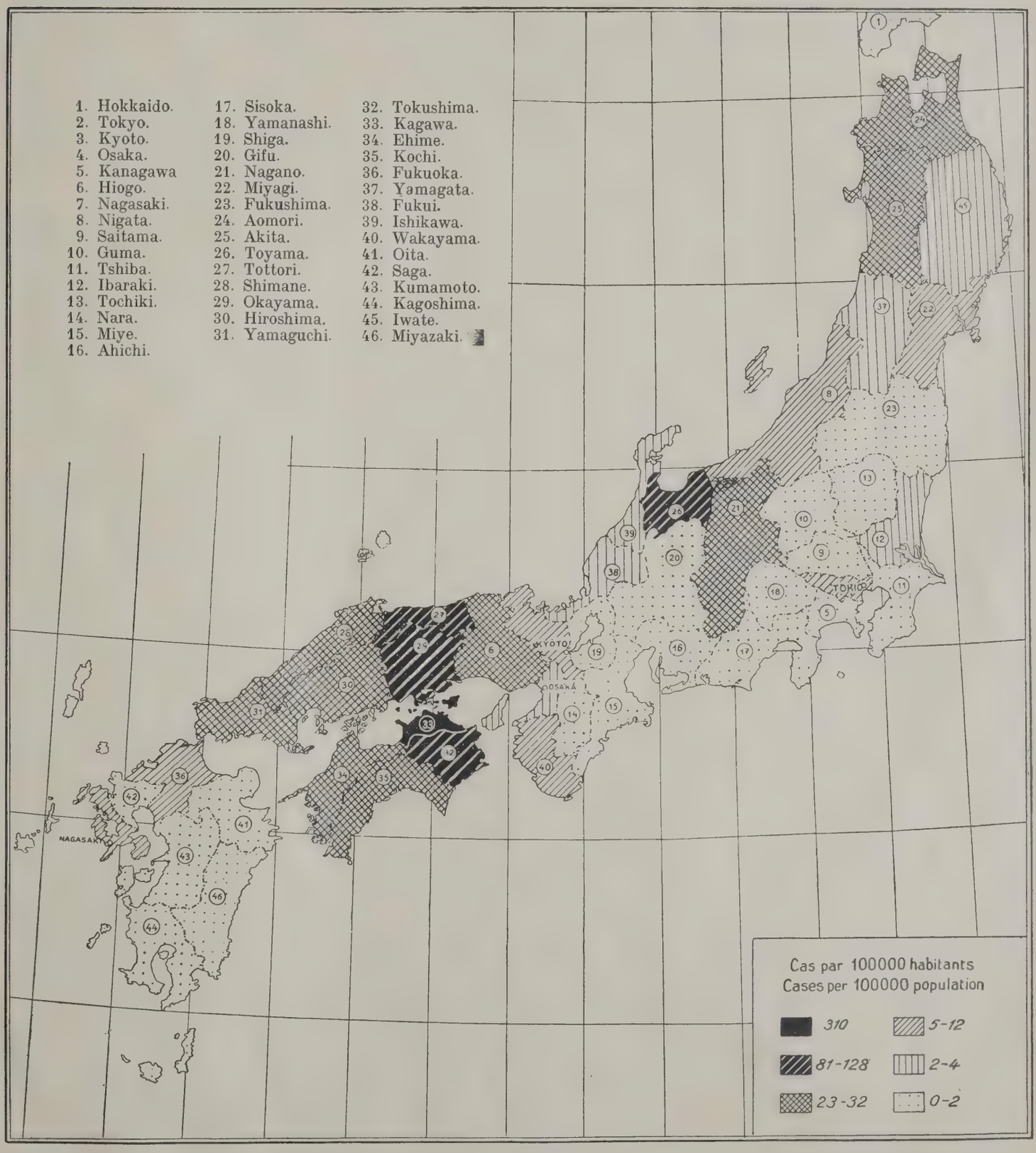



A severe epidemic of a disease first reported as cerebro-spinal meningitis, later as encephalitis lethargica and finally classified as an unidentified epidemic disease of the central nervous system, occurred during the summer of 1924 in *Japan*. The epidemic started at the beginning of August in the Department of Toyama on the west coast and spread with startling rapidity through many provinces, reaching its maximum at the beginning of September. 6,551 cases of this disease were reported in August and September, to which must be added 1,398 cases reported during the same period as cerebro-spinal meningitis and 1,619 cases reported as suspect cases of

this disease, so that the total number of cases was probably about 10,000. The case mortality was very high and averaged 55 per cent.

The geographical distribution is given below and is also shown on the map.

GEOGRAPHICAL DISTRIBUTION OF THE EPIDEMIC WHICH OCCURRED IN JAPAN IN AUGUST AND SEPTEMBER 1924, INCLUDING THE CASES NOTIFIED AS EPIDEMIC CEREBRO-SPINAL MENINGITIS OR AS SUSPECTED CASES OF THE LATTER DISEASE.



CASES OF AN EPIDEMIC DISEASE OF THE CENTRAL NERVOUS SYSTEM, TOGETHER WITH CASES AND SUSPECTED CASES OF EPIDEMIC CEREBRO-SPINAL MENINGITIS REPORTED IN JAPAN FROM AUGUST 10TH TO OCTOBER 18TH, 1924.

| *Province* | *Epid. centr. nerv. system* | *Epid. cerebro-spinal mening.* | *Suspected cases* | *Total* | *Province* | *Epid. centr. nerv. system* | *Epid. cerebro-spinal mening.* | *Suspected cases* | *Total* |
|---|---|---|---|---|---|---|---|---|---|
| Hokkaido . . | 4 | 9 | 6 | 19 | *Brought fwd.* | 1,319 | 271 | 467 | 2,057 |
| Tokyo . . . . | 59 | 96 | 61 | 216 | Aomori . . . | 78 | 4 | 94 | 176 |
| Kioto . . . . | 56 | 9 | 24 | 89 | Yamagata. . | 17 | 4 | 15 | 36 |
| Osaka . . . . | 57 | 29 | 0 | 86 | Akita . . . | 105 | 176 | 0 | 281 |
| Kanagawa . . | 16 | 17 | 0 | 33 | Fukui . . . | 19 | 0 | 4 | 23 |
| Hyogo . . . . | 725 | 19 | 0 | 744 | Ishikawa . . | 12 | 0 | 13 | 25 |
| Nagasaki . . | 21 | 17 | 24 | 62 | Toyama . . | 712 | 0 | 0 | 712 |
| Niigata . . . . | 72 | 1 | 67 | 140 | Tottori . . | 420 | 31 | 133 | 584 |
| Saitama . . . | 3 | 3 | 0 | 6 | Shimane . . | 105 | 26 | 54 | 185 |
| Gumma . . . . | 11 | 2 | 10 | 23 | Okayama . . | 654 | 379 | 275 | 1,308 |
| Thiba . . . . | 4 | 4 | 4 | 12 | Hiroshima . | 181 | 132 | 144 | 457 |
| Ibaraki . . . . | 27 | 5 | 12 | 44 | Yamaguchi . | 129 | 71 | 80 | 280 |
| Tochigi . . . . | 4 | 2 | 0 | 6 | Nakayama . | 44 | 6 | 9 | 59 |
| Nara . . . . . | 7 | 1 | 0 | 8 | Tokushima . | 316 | 229 | 0 | 545 |
| Myie . . . . . | 0 | 2 | 0 | 2 | Kagawa . . . | 1,963 | 4 | 132 | 2,099 |
| Ahichi . . . . | 1 | 7 | 1 | 9 | Ehime . . . | 254 | 4 | 46 | 304 |
| Shisoka . . . | 3 | 4 | 3 | 10 | Kochi . . . | 99 | 30 | 29 | 158 |
| Yamanashi . . | 3 | 1 | 2 | 6 | Fukuoka . . | 112 | 22 | 121 | 255 |
| Shiga . . . . . | 7 | 0 | 0 | 7 | Oita . . . . | 2 | 1 | 1 | 4 |
| Gifu . . . . . | 7 | 0 | 9 | 16 | Saga . . . | 2 | 0 | 0 | 2 |
| Nagano . . . | 193 | 8 | 202 | 403 | Kumamoto . | 4 | 3 | 2 | 9 |
| Miyagi . . . . | 28 | 7 | 34 | 69 | Miyasaki . . | 0 | 0 | 0 | 0 |
| Fukushima . . | 11 | 2 | 8 | 21 | Kagoshima . | 4 | 4 | 0 | 8 |
| Iwate . . . . | 0 | 26 | 0 | 26 | Okinawa . . | 0 | 1 | 0 | 1 |
| *Carried fwd.* . . | 1,319 | 271 | 467 | 2,057 | *Total* . . . . | 6,551 | 1,398 | 1,619 | 9,568 |

It is seen that the outbreak was most severe on the northern shores of the mainland and of Shikoku Island. This may be related to the fact that the summer rainfall in Japan is lower on the northern than on the southern shores; the summer of 1924 was also exceptionally dry.

A clinical description of the disease was given in the *Monthly Epidemiological Report* No. 73, pages 676–677. Certain of the epidemiological features of the disease were those which have hitherto characterised epidemic encephalitis. On the other hand, the rapid rise and fall of the epidemic, its occurrence in mid-summer and the general absence of secondary cases in infected households somewhat recall the severe epidemic of acute poliomyelitis in the United States during the summer of 1916. The age distribution resembled that of common influenza, with a preponderance of cases in the advanced years of life — a distribution which is never found in poliomyelitis or cerebro-spinal meningitis. The case mortality was also highest at the older ages.

## ACUTE POLIOMYELITIS

Acute poliomyelitis was more prevalent in 1924 than during the two preceding years in *Sweden*, *Denmark*, *England and Wales*, *France*, the *United States* and *Australia*. A very severe epidemic occurred in *Iceland*, where the incidence was as high as 2 per 1,000 inhabitants. The case mortality of this epidemic was 37 per cent, indicating a very unusual severity of the disease.

| *Country* | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| | | | | AFRICA. | | | |
| Algeria . . . . . | Cases | 1 | 1 | 13 | 2 | 5 | 1 |
| Union of South Africa. . | Cases | 10 | 35 | 33 | 18[a] | 5[b] | [c]3 |

[a] January 1st to June 30th, 1922.
[b] July 1st to June 30th, 1923.
[c] July 1st to June 30th, 1924.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **AMERICA.** | | | | | | | |
| Canada | Cases | — | — | — | — | — | 217 |
| | Deaths | — | — | — | — | — | 35 |
| Ontario only | Cases | 49 | 37 | 81 | 205 | 19 | 64 |
| Hawaii | Cases | — | — | 3 | — | 10 | 2 |
| | Deaths | — | — | 1 | 1 | — | — |
| Panama Canal Zone | Cases | — | — | 3 | 3 | 0 | 12 |
| United States | Cases | 1,891 | 2,293 | 6,266 | 2,222 | 3,285 | 5,170 |
| (Number of States reporting) | | (35) | (35) | (42) | (40) | (45) | (45) |
| Uruguay | Cases | 3 | 29 | 5 | 15 | 5 | 0 |
| | Deaths | 3 | 1 | 4 | 4 | 2 | 0 |
| **AUSTRALASIA.** | | | | | | | |
| Australia | Cases | 134 | 71[a] | 140 | 114 | 137 | 232 |
| New Zealand | Cases | 11 | 76 | 267 | 98 | 16 | 58 |
| | Deaths | 1 | 2 | 9 | 9 | 1 | 11 |
| **EUROPE.** | | | | | | | |
| Austria | Cases | 1 | 26 | 13 | 10 | 14 | 19 |
| | Deaths | 0 | 0 | 0 | 0 | 0 | 4 |
| Denmark | Cases | 389 | 60 | 70 | 59 | 76 | 154 |
| England and Wales | Cases | 553 | 293 | 488 | 335 | 587 | 777 |
| | Deaths | — | — | 129 | 109 | 79 | — |
| Finland | Cases | 12 | 19 | 15 | 30 | 47 | 45 |
| France | Cases | 194 | 134 | 211 | 165 | 175 | 216 |
| Germany | Cases | — | — | — | — | 204[b] | 498 |
| Hungary | Cases | — | — | 14 | 3 | 2 | 0 |
| | Deaths | — | — | 1 | 1 | 1 | 0 |
| Netherlands | Cases | — | — | — | — | — | 39 |
| | Deaths | — | — | — | — | — | 9 |
| Norway (cities) | Cases | 35 | 24 | 3 | 5 | 19 | 13 |
| | Deaths | — | 2 | 0 | 1 | 1 | 1 |
| Saar Territory | Cases | — | — | — | — | 3 | 2 |
| | Deaths | — | — | — | — | 3 | 0 |
| Sweden | Cases | 820 | 181 | 141 | 112 | 309 | 653 |
| Switzerland | Cases | 31 | 104 | 72 | 65 | 257 | 110 |

[a] For five divisions only.
[b] Data for eight provinces only.

The number of cases reported in *Sweden* was the highest since 1919 but was much lower than that reported in the epidemic of 1911–1912. The maximum occurred in September. In *England* the number of cases reported remained practically constant from August to November, which was the epidemic period. The outbreak in *Iceland* culminated as early as July. In the *United States* the incidence of poliomyelitis was highest in the States along the northern border, Washington, Montana, Michigan and the north of New York State. As usual, few cases were reported from the southern States.

An outbreak occurred in *Australia* in Queensland and New South Wales, and in December there was an increase of cases in *New Zealand* which eventually developed into a serious epidemic during the early months of 1925.

## CEREBRO-SPINAL MENINGITIS.

Unlike encephalitis lethargica and acute poliomyelitis, cerebro-spinal meningitis is notifiable in nearly all parts of the world. The following data are available for the last six years:

| *Country* | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| | | | | AFRICA. | | | |
| Algeria | Cases | 39 | 25 | 31 | 61 | 61 | 38 |
| Basutoland | Cases | — | — | — | 4 | 8 | 3 |
| | Deaths | — | — | — | — | 1 | 2 |
| Egypt | Cases | 85 | 43 | 43 | 41 | 44 | 18 |
| | Deaths | 52 | 28 | 19 | 25 | 37 | 13 |
| Gold Coast | Cases | — | — | — | — | 0 | 4 |
| | Deaths | — | — | — | — | 0 | 2 |
| Kenya | Cases | — | — | — | — | 50 | 36 |
| Mauritius | Cases | — | 1 | 5 | 1 | 3 | 0 |
| Nigeria | Cases | — | — | 168 | — | 170 | 529 |
| | Deaths | — | — | 2 | — | 154 | 1,824 |
| Northern Rhodesia | Cases | — | — | — | — | 1 | 0 |
| | Deaths | — | — | — | — | 0 | 0 |
| Southern Rhodesia | Cases | — | — | — | 3 | 6 | 3 |
| | Deaths | — | — | — | 1 | 2 | 2 |
| Tanganyika | Cases | — | — | 17 | 9 | 101 | 2 |
| | Deaths | — | — | 4 | 6 | 89 | 1 |
| Tunisia | Cases | — | — | — | — | 21 | 11 |
| Uganda | Cases | — | — | — | 677 | 207 | 118 |
| | Deaths | — | — | — | 471 | 87 | 103 |
| Union of South Africa | Cases | 21 | 128 | 113 | 58[a] | 515[b] | 826[c] |
| | | | | AMERICA. | | | |
| Argentine: Buenos Aires | Deaths | — | — | — | — | 7 | 5 |
| Brazil: Rio de Janeiro | Deaths | 4 | 110 | 95 | 119 | 46 | 17 |
| British Guiana | Cases | — | — | — | 2 | 2 | 2 |
| | Deaths | 0 | 0 | 0 | 0 | 2 | 1 |
| Canada | Cases | — | — | — | — | — | 144 |
| | Deaths | — | — | — | — | — | 175 |
| Ontario only | Cases | 131 | 77 | 79 | 71 | 64 | 77 |
| Cuba | Cases | — | — | — | — | 6 | 12 |
| Havana | Cases | 2 | 39 | 19 | 1 | 6 | 7 |
| | Deaths | 1 | 16 | 11 | 2 | 1 | 2 |
| Haiti | Cases | — | — | — | — | — | 2 |
| Hawaii | Cases | 8 | 5 | 21 | 17 | 13 | 53 |
| United States (36 states) | Cases | 2,574[d] | 2,616[e] | 2,070 | 1,666 | 1,747 | 1,405 |
| Uruguay | Cases | 5 | 9 | 8 | 11 | 6 | 6 |
| | Deaths | 3 | 16 | 6 | 6 | 9 | 12 |

[a] From Jan. 1st to June 30th.
[b] From July 1st, 1922, to June 30th, 1923.
[c] From July 1st, 1923, to June 30th, 1924.
[d] 34 States.
[e] 32 States.

| *Country* | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| | | | | ASIA. | | | |
| Cyprus . . . . . | Cases | 10 | 9 | 27 | 7 | 4 | — |
| Dutch East Indies: | | | | | | | |
| Java and Madoera . | Cases | — | — | — | — | — | 21 |
| | Deaths | — | — | — | — | — | 9 |
| Hong-Kong . . . . . | Cases | 269 | 158 | 125 | 53 | 107 | 80 |
| | Deaths | 204 | 103 | 73 | 38 | 95 | 65 |
| Iraq . . . . . | Cases | — | — | 26 | 12 | 8 | 13 |
| | Deaths | — | — | — | — | 6 | 7 |
| Japan . . . . . | Cases | 2,458 | 951 | 772 | 935 | 708 | 1,348 |
| | Deaths | 1,261 | 491 | 413 | 544 | 374 | 849 |
| Palestine . . . . . | Cases | — | — | 15 | 23 | 5 | 3 |
| | Deaths | — | — | 10 | 19 | 4 | 2 |
| Siam . . . . . | Cases | — | — | — | — | 67 | 15 |
| | Deaths | — | — | — | — | 25 | 7 |
| Straits Settlements . . | Cases | — | 29 | 86 | 85 | 20 | 20 |
| | Deaths | — | 22 | 54 | 45 | 14 | 16 |
| Singapore, Penang | Cases | — | — | — | — | 14 | 19 |
| and Malacca. . . | Deaths | — | — | — | — | 17 | 15 |
| Turkey . . . . . | Cases | — | — | — | — | — | 19 |
| | Deaths | — | — | — | — | — | 7 |
| | | | | AUSTRALASIA. | | | |
| Australia . . . . . | Cases | 100 | 100 | 80 | 69 | 61 | 71 |
| New Zealand. . . . . | Cases | 96 | 79 | 56 | 42 | 36 | 30 |
| | Deaths | 40 | 34 | 23 | 23 | 14 | 13 |
| | | | | EUROPE. | | | |
| Austria . . . . . | Cases | 46 | 34 | 21 | 38 | 38 | 39 |
| Belgium . . . . . | » | 63 | 38 | 35 | 50 | 56 | 34 |
| Bulgaria . . . . . | » | 16 | 17 | 36 | 6 | 12 | 13 |
| Czechoslovakia . . . . | » | 67 | 75 | 80 | 190 | 142 | 145 |
| Danzig . . . . . | Cases | 2 | 4 | 0 | 0 | 0 | 1 |
| | Deaths | 0 | 1 | 1 | 0 | 0 | 1 |
| Denmark . . . . . | Cases | 227 | 144 | 92 | 84 | 96 | 122 |
| England and Wales . . | » | 848 | 583 | 411 | 344 | 301 | 396 |
| Esthonia . . . . . | » | 2 | 9 | 12 | 14 | 12 | 12 |
| France . . . . . | » | 490 | 417 | 398 | 379 | 381 | 562 |
| Germany . . . . . | » | — | — | 696 | 1,622 | 1,149 | 742 |
| Greece . . . . . | » | — | — | — | — | — | 155 |
| Hungary . . . . . | » | — | — | 35 | 49 | 29 | 29 |
| Italy . . . . . | » | 266 | 110 | 86 | 66 | 368 | 403 |
| Latvia . . . . . | » | — | 88 | 31 | 22 | 19 | 20 |
| Lithuania . . . . . | » | — | — | — | 20 | 13 | 15 |
| Netherlands . . . . . | » | 122 | 133 | 120 | 132 | 111 | 108 |
| Norway (cities) . . . . | » | 14 | 16 | 15 | 6 | 12 | 8 |
| Poland (meningitis) . . | » | 330 | 596 | 477 | 533 | 597 | 414 |
| Saar Territory . . . . | » | — | — | 15 | 27 | 50 | 76 |
| Scotland . . . . . | » | 191 | 86 | 121 | 116 | 114 | 172 |
| Sweden . . . . . | » | 116 | 102 | 120 | 79 | 85 | 116 |
| Switzerland . . . . . | » | 30 | 39 | 32 | 30 | 69 | 33 |

It is seen that cerebro-spinal meningitis occurs in all parts of the world but that cases are seldom numerous. There has been a decline in the incidence in most countries since the period of high prevalence which followed the war. More serious outbreaks occurred only in *Japan*, of which mention has been made above in connection with epidemic encephalitis, and in certain parts of *Africa*. Several important outbreaks occurred during recent years in various districts of the grasslands south of the North African desert belt. In March 1924, 987 deaths from this disease were reported in Katsina district in *Nigeria*, where a total of 1,824 deaths occurred during the year. In the *Union of South Africa*, cerebro-spinal meningitis was prevalent in the Transvaal, where there were 686 cases during the year ending June 30th, 1924, and 476 during the preceding twelve months.

## SCARLET FEVER

There are certain facts which must be considered in regard to scarlet fever prevalence before drawing any conclusions from the available data. In the first place it is a disease of almost universal and continuous prevalence, so that it causes less anxiety than other epidemic diseases such as cholera and plague and for this reason is apt to be incompletely reported. Secondly, it appears in a mild form in many parts of the world, notably Western Europe, North America and in certain tropical and sub-tropical countries, and on this account many patients are not attended by physicians and the cases consequently not recorded. Thirdly, the reported fatality rate gives little indication of the actual number of cases, as it varies within wide limits, being relatively high in Eastern Europe, particularly in Russia and neighbouring countries, and low in the countries mentioned above. There is no doubt that the degree of completeness of notification varies in different countries, and in the same countries at different times, so that it is difficult to draw any but very general conclusions from the official figures. For some years the fatality rate in the United States has remained low with a tendency to decrease each year, and some observers believe that this points to a gradual disappearance of the disease. Vaughan has pointed out, however, that the same conditions obtained a century ago and were followed by a greatly increased virulence of scarlet fever. The explanation of this and the variation in fatality rates in different countries is based by some on the existence of more than one type of this disease, as in the case of smallpox.

### AFRICA

| *Country* | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| Algeria | Cases | 102 | 103 | 87 | 111 | 163 | 219 |
| Egypt | Cases | 206 | 135 | 166 | 134 | 107 | 164 |
| | Deaths | 15 | 19 | 15 | 3 | 5 | 8 |
| Southern Rhodesia | Cases | — | — | 5 | 4 | 4 | 6 |
| Tunisia | Cases | — | — | — | — | 37 | 66 |
| Union of South Africa | Cases | 2,783 | 1,756 | 920 | 640 [1] | 2,042 [2] | 1,024 [3] |

[1] From January 1st to June 30th.
[2] From July 1st, 1922, to June 30th, 1923.
[3] From July 1st, 1923, to June 30th, 1924.

It is seen that very few cases are reported in Africa. This may be due partly to the difficulty of obtaining complete notification; but it is obvious, if the small number of scarlet fever cases in Egypt be compared with the very much larger number reported for measles, that the former disease cannot be very prevalent in that country.

### AMERICA

| *Country* | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| Canada | Cases | — | — | — | — | — | 17,340 |
| | Deaths | — | — | — | — | — | 393 |
| Ontario only | Cases | 3,749 | 5,130 | 4,564 | 3,950 | 5,011 | 7,332 |
| Cuba: | | | | | | | |
| Havana | Cases | 25 | 109 | 74 | 130 | 36 | 38 |
| | Deaths | 1 | 22 | 3 | 0 | 0 | 1 |
| Hawaii | Cases | 21 | 17 | 21 | 32 | 21 | 14 |
| Panama Canal Zone | Cases | — | — | 58 | 24 | 6 | 1 |
| Uruguay | Cases | 99 | 105 | 36 | 75 | 108 | 989 |
| | Deaths | 0 | 4 | 4 | 5 | 3 | 20 |
| United States | Cases | 104,503 | 157,547 | 189,856 | 158,975 | 173,389 | 183,253 |
| (number of States) | | (38) | (42) | (47) | (48) | (47) | (47) |

An increase took place during 1924 in the number of cases of scarlet fever reported in the *United States*. With two States not reporting, there were nearly 10,000 more cases than in 1923. The number in 1921, however, was even higher. A similar increase is observed in Ontario. In America as a whole the fatality rate continued low; Massachusetts, New York, Pennsylvania, Ohio and Michigan reported the largest number of cases, and increases over 1923 occurred in the first three.

ASIA

| *Country* | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| Iraq | Cases | — | — | — | 7 | 2 | 12 |
| | Deaths | — | — | — | 0 | 0 | 0 |
| Japan | Cases | 1,325 | 1,368 | 1,589 | 1,657 | 1,562 | 1,843 |
| | Deaths | 109 | 90 | 82 | 97 | 88 | 121 |
| Korea | Cases | — | 371 | 717 | 585 | 1,008 | 1,361 |
| | Deaths | — | 106 | 209 | 239 | 242 | 338 |
| Palestine | Cases | — | — | 115 | 83 | 13 | 7 |
| | Deaths | — | — | 1 | 0 | 0 | 0 |
| Asiatic Russia: | | | | | | | |
| Siberia | Cases | — | — | — | 4,123 | 5,183 | 5,650 |
| Far Eastern Republic | » | — | — | — | — | 1,945 | 1,624 |
| Kirghiz Republic | » | — | — | — | 1,330 | 281 | 480 [1] |
| Turkestan | » | — | — | — | 111 | 95 | 33 [1] |
| Transcaucasia | » | — | — | — | 204 | 330 | 200 |
| Turkey | Cases | — | — | — | — | — | 859 |
| | Deaths | — | — | — | — | — | 137 |

[1] Three quarters only.

The increase in *Japan* was accompanied by a still greater increase in mortality, the fatality rate being much higher than in Western Europe and America, though the actual number of cases was small compared, for example, with the incidence in Western Europe.

*Incidence of Scarlet Fever in Japan,* 1919-1924.

| *Year* | *Cases* | *Deaths* | *Fatality rate* |
|---|---|---|---|
| 1919 | 1,325 | 109 | 8.2 % |
| 1920 | 1,368 | 90 | 6.6 % |
| 1921 | 1,589 | 82 | 5.2 % |
| 1922 | 1,657 | 97 | 5.9 % |
| 1923 | 1,562 | 88 | 5.6 % |
| 1924 | 1,843 | 121 | 6.6 % |

AUSTRALASIA

| *Country* | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| Australia | Cases | 2,954 | 5,180 | 6,104 | 5,779 | 6,634 | 7,345 |
| | Deaths | 69 | 90 | 42 | 38 | 45 | — |
| New Zealand | Cases | 1,521 | 1,248 | 1,845 | 1,449 | 1,208 | 1,167 |
| | Deaths | 23 | 15 | 24 | 10 | 9 | 13 |

In both Australia and New Zealand, fatality rates are extremely low and the prevalence of the disease has fluctuated very slightly during the years for which data are available.

EUROPE

| *Country* | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| Austria | Cases | 2,932 | 4,635 | 4,210 | 2,658 | 3,154 | 3,826 |
| | Deaths | 132 | 240 | 126 | 63 | 76 | 28 |
| Belgium | Cases | 2,259 | 1,985 | 1,588 | 1,496 | 2,008 | 1,252 |
| Bulgaria | Cases | 3,113 | 4,398 | 5,645 | 7,196 | 15,585 | 7,466 |
| | Deaths | 552 | 760 | 1,453 | 1,211 | 2,935 | 1,360 |
| Czechoslovakia | Cases | 3,685 | 4,188 | 9,425 | 10,784 | 10,522 | 9,709 |
| | Deaths | 160 | 156 | 906 | 1,215 | 755 | 464 |
| Danzig | Cases | 207 | 234 | 214 | 133 | 262 | 520 |
| | Deaths | 12 | 10 | 11 | 3 | 27 | 44 |
| Denmark | Cases | 8,330 | 12,285 | 11,093 | 5,109 | 3,851 | 3,116 |
| England and Wales | Cases | 82,398 | 119,490 | 137,073 | 108,242 | 85,603 | 84,652 |
| | Deaths | 1,221 | 1,430 | 1,305 | 1,382 | 993 | — |
| Esthonia | Cases | 2,100 | 2,549 | 1,433 | 583 | 675 | 451 |
| Finland | Cases | 7,395 | 1,970 | 1,359 | 990 | 1,148 | 1,842 |
| France | Cases | 11,056 | 16,839 | 13,667 | 7,435 | 5,254 | 6,595 |
| Germany | Cases | — | — | 48,281 | 32,448 | 27,234 | 32,798 |

EUROPE *(continued)*.

| *Country* | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| Greece | Cases | — | — | — | — | — | 594 |
| | Deaths | — | — | — | — | — | 127 |
| Hungary | Cases | — | — | 21,664 | 13,243 | 6,386 | 5,727 |
| | Deaths | — | — | 2,866 | 2,038 | 687 | 340 |
| Northern Ireland | Cases | — | — | — | — | — | 2,898 |
| | Deaths | 199 | 206 | 51 | 46 | 50 | 89 |
| Irish Free State | Deaths | — | — | — | 73 | 66 | 56 |
| Italy | Cases | 6,690 | 10,209 | 11,079 | 11,965 | 13,418 | 16,320 |
| Latvia | Cases | — | 2,572 | 1,532 | 1,598 | 1,555 | 1,450 |
| Lithuania | Cases | — | — | — | 437 | 230 | 399 |
| | Deaths | — | — | — | 26 | 11 | 25 |
| Netherlands | Cases | 16,721 | 6,208 | 4,045 | 3,301 | 3,580 | 6,636 |
| | Deaths | 348 | 129 | 58 | 35 | 28 | 54 |
| Norway | Cases | 1,077 | 889 | 483 | 913 | 1,108 | 641 |
| (cities) | Deaths | 11 | 15 | 0 | 6 | 4 | 1 |
| Poland | Cases | 4,690 | 16,664 | 28,164 | 14,717 | 15,746 | 18,030 |
| | Deaths | 547 | 2,256 | 3,924 | 1,945 | 1,711 | 1,570 |
| Roumania | Cases | 2,179 | 15,562 | 43,670 | 29,027 | 23,706 | 16,696 |
| | Deaths | 317 | 2,033 | 5,910 | 4,075 | 3,048 | 1,694 |
| Asiatic Russia (without Ukraine) | Cases | 37,026 | 56,693 | 74,009 | 55,827 | 73,073 | 122,003(*a*) |
| Ukraine | Cases | — | — | 33,263 | 18,538 | 19,474 | 30,966(*b*) |
| Saar Territory | Cases | — | — | 192 | 148 | 165 | 256 |
| | Deaths | — | — | 5 | 2 | 5 | 7 |
| Scotland | Cases | 12,787 | 17,449 | 17,025 | 14,589 | 16,754 | 8,984 |
| | Deaths | 222 | 245 | 270 | 247 | 352 | 410 |
| Kingdom of the Serbs, Croats and Slovenes | Cases | — | 4,940 | 15,221 | 18,088 | 16,521 | 9,788 |
| | Deaths | — | 882 | 2,769 | 3,997 | 3,669 | 2,038 |
| Spain | Deaths | 675 | 1,235 | 856 | 628 | 471 | 297 |
| Sweden | Cases | 9,310 | 9,750 | 9,264 | 10,718 | 10,829 | 11,022 |
| Switzerland | Cases | 3,865 | 3,939 | 3,733 | 2,272 | 2,137 | 2,351 |

(*a*) Provisional figures.
(*b*) Eleven months only.

The most noteworthy features of scarlet fever prevalence in Europe in 1924, as compared with 1923, are the sharp increase in the incidence in *European Russia* (amounting to nearly 50,000 cases) and the equally sharp decline in the number of cases reported in *Bulgaria*, where scarlet fever reached epidemic proportions last year. In *Scotland* the number of cases decreased by nearly 50 per cent, while the number of deaths actually increased. *Germany*, *France*, the *Netherlands* and *Italy* showed increases which are probably due to the tendency of scarlet fever to fluctuate periodically.

The prevalence and fatality rate of scarlet fever remained high in *Poland* and in the *Kingdom of the Serbs, Croats and Slovenes*, although lower than in 1923 in the latter country. In *Roumania* the number of cases reported continued to decline from the high figure of 1921, though the fatality rate remained high. In *Czechoslovakia* the number of deaths decreased by nearly 40 per cent, but there was little corresponding decrease in the number of cases reported, indicating either more complete reporting or, more probably, a lower fatality rate.

*Bulgaria.* A decrease in the prevalence of scarlet fever in Bulgaria in 1924 was evident in the second, third and fourth quarters of the year and was accompanied by a corresponding diminution in mortality. The fatality rate remained high.

*Seasonal Distribution of Scarlet Fever in Bulgaria*, 1922-1924.

| | 1922* | 1923* | 1924* |
|---|---|---|---|
| 1st quarter | 1,219 | 2,004 | 3,708 |
| 2nd " | 703 | 1,869 | 1,335 |
| 3rd " | 1,654 | 3,871 | 1,046 |
| 4th " | 3,609 | 7,841 | 1,377 |
| Total: | 7,185 | 15,585 | 7,466 |
| Deaths: | 1,211 | 2,935 | 1,360 |

* Provisional figures.

*Czechoslovakia.* In 1922 the number of deaths from scarlet fever in Czechoslovakia were over one-tenth of the number of cases reported; in 1923 the fatality rate fell to 7 per cent and in 1924 to under 5. There was, however, practically no decrease in the number of cases reported, so it is obvious, provided reporting is complete, that the virulence of the disease has abated. Following the usual seasonal distribution of scarlet fever in this country, the last quarter of 1924 showed the highest figures.

*Poland.* The increase in the number of cases in Poland in 1924 as compared with 1923 occurred during the early and latter parts of the year, the February and December reports showing the greatest increases. The western and central-eastern zones were the most affected by the higher incidence.

*European Russia.* The provisional figures available show a marked increase in scarlet fever in Russia during 1924. The number of cases reported was higher for each month of the year as compared with 1923, the increase being especially marked during the final quarter.

*Distribution of Scarlet Fever in European Russia, by quarters*, 1923-1924.

| | 1923 | 1924 |
|---|---|---|
| 1st quarter | 18,332 | 24,554 |
| 2nd " | 12,535 | 18,271 |
| 3rd " | 17,555 | 33,599 |
| 4th " | 24,076 | 45,579 |
| | 72,498 | 122,003 |

The geographical distribution of cases in Russia showed the greatest prevalence to be in the North-Western, Central Industrial and Lower Volga districts.

*Kingdom of the Serbs, Croats and Slovenes.* While the prevalence and mortality of scarlet fever have declined in the Kingdom of the Serbs, Croats and Slovenes since 1922, the fatality rate remains high. The disease was most prevalent in January, September, February, December and October, in the order given. The highest number of cases occurred in Serbia, Voivodina. Dalmatia and Bosnia-Herzegovina.

## DIPHTHERIA

Diphtheria and scarlet fever have much in common in so far as notification is concerned. The relative importance of these two diseases varies in the different countries; in some, scarlet fever presents the more serious problem and in others diphtheria. In Eastern and Southern Europe, scarlet fever was a more serious menace to the public health in 1924 than diphtheria, and the latter was more serious in Western Europe and America. The prevalence of both diseases tends to rise and fall in cycles, and the importance of minor movements of this kind is difficult to judge without the use of a system of endemic indices, which naturally is not practicable in this volume.

### AFRICA

| *Country.* | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| Algeria | Cases | 158 | 192 | 726 | 370 | 439 | 575 |
| Egypt | Cases | 977 | 810 | 873 | 959 | 1,137 | 1,545 |
| | Deaths | 347 | 316 | 336 | 422 | 464 | 689 |
| Southern Rhodesia | Cases | — | — | 8 | 0 | 3 | 2 |
| Tunisia | Cases | — | — | — | — | 203 | 282 |
| Union of South Africa | Cases | 1,036 | 1,110 | 1,014 | 540 [1] | 835 [2] | 1,037 [3] |

[1] Six months only.
[2] From July 1st, 1922, to June 30th, 1923.
[3] From July 1st, 1923, to June 30th, 1924.

The high fatality rate reported in *Egypt* may be due to the virulence of the disease or more probably to incomplete notification of cases. The number of cases, however, represents an increase over any year for which records are available. Both diphtheria and scarlet fever are apparently of small importance in Egypt, but the former is by far the more prevalent. In South Africa, on the other hand, the two diseases rank about equal, and serious outbreaks of diphtheria are rare. The case-fatality rate appears to be fairly high, but no mortality data are available since 1921, when 170 deaths from diphtheria occurred among Europeans.

AMERICA

| *Country* | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| Canada | Cases | — | — | — | — | — | 9,068 |
| | Deaths | — | — | — | — | — | 977 |
| Ontario only: | Cases | 4,261 | 5,940 | 6,313 | 3,529 | 2,935 | 3,475 |
| | Deaths | 444 | 654 | 525 | 410 | 244 | 271 |
| Cuba: | | | | | | | |
| Havana | Cases | 79 | 78 | 64 | 95 | 129 | 157 |
| | Deaths | 10 | 16 | 17 | 13 | 18 | 12 |
| Hawaii | Cases | 154 | 125 | 186 | 235 | 186 | 223 |
| Panama Canal Zone | Cases | — | — | 136 | 174 | 99 | 67 |
| Porto Rico | Cases | 98 | 149 | 99 | 116 | 262 | 472 |
| United States | Cases | 127,824 | 147,632 | 206,939 | 172,160 | 144,124 | 119,743 |
| (No. of States reporting) | | (38) | (42) | (47) | (48) | (47) | (47) |
| Uruguay | Cases | 760 | 1,280 | 1,137 | 627 | 339 | 400 |
| | Deaths | 109 | 154 | 167 | 79 | 62 | 38 |

The slight rise in the number of cases reported in Ontario in 1924 may be contrasted with the decline in the United States. The fatality rate in *Canada* as a whole was higher than in Ontario, probably owing to less complete reporting. Diphtheria, while less prevalent than scarlet fever in Canada, appears to bear a higher mortality rate. In the *United States* the number of cases reported in 1924 was lower than for any other year shown in the table above. How much of the decline is due to preventive measures and how much to natural movements in the incidence cannot be determined from the information at present available. It is known, however, that preventive measures are being vigorously carried out in States with adequate public health organisations, especially in the larger eastern and middle-western cities. Data on diphtheria mortality in the larger cities in the United States show that 1924 was a year of low mortality in comparison with previous years, except in the Rocky Mountain and Pacific States. Schick tests have revealed the comparative immunity of negroes, cities with a considerable proportion of this race having low mortality rates. Children of Italian parentage in the United States also show comparatively little susceptibility to the disease. The death rate is in general higher in the north than in the south. In the east north-central States a comparatively mild form of diphtheria prevails, with a fatality rate of about 5 per cent in those States where notification is fairly complete.

ASIA

| *Country.* | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| Hongkong | Cases | 50 | 76 | 85 | 71 | 91 | 88 |
| | Deaths | 36 | 28 | 38 | 32 | 43 | 40 |
| Iraq | Cases | — | — | — | 43 | 26 | 28 |
| | Deaths | — | — | — | — | 8 | 9 |
| Korea | Cases | — | 264 | 238 | 265 | 419 | 523 |
| | Deaths | | 69 | 93 | 101 | 141 | 185 |
| Japan | Cases | 14,280 | 15,173 | 14,522 | 13,737 | 12,776 | 13,109 |
| | Deaths | 3,343 | 3,439 | 3,501 | 3,254 | 3,111 | 3,175 |
| Palestine | Cases | — | — | 35 | 83 | 39 | 25 |
| | Deaths | — | — | 1 | 7 | 7 | 1 |
| Asiatic Russia: | | | | | | | |
| Siberia | Cases | — | — | — | — | 668 | 582 |
| Far Eastern Republic | ,, | — | — | — | 686 | 2,318 | 2,370 |
| Turkestan | ,, | — | — | — | 270 | 263 | 129* |
| Kirghiz Republic | ,, | — | — | — | 940 | 379 | 336* |
| Turkey | Cases | — | — | — | — | — | 227 |
| | Deaths | — | — | — | — | — | 37 |

* Nine months only.

Diphtheria morbidity and mortality are very regular in *Japan* for those years for which data are available. The fatality rate is high; evidently the disease is a more serious problem than scarlet fever in this country.

## AUSTRALASIA

| *Country.* | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| Australia | Cases | 11,858 | 16,024 | 24,783 | 14,156 | 9,915 | 10,918 |
| | Deaths | 581 | 829 | 917 | 543 | 395 | — |
| New Zealand | Cases | 3,499 | 2,442 | 2,611 | 1,989 | 1,936 | 2,708 |
| | Deaths | 149 | 91 | 103 | 78 | 66 | 59 |

In *Australia*, diphtheria is more prevalent than scarlet fever and causes more deaths, but the fatality rate is not high, being under 4 % in 1923. There was a slight increase in the number of cases reported in 1924 as compared with 1923.

*New Zealand* also experienced a slight increase in diphtheria morbidity, but the fatality rate remained low. Neither scarlet fever nor diphtheria appear to be serious problems in Australasia.

## EUROPE

| *Country.* | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| Austria | Cases | 5,578 | 5,288 | 3,921 | 2,807 | 2,806 | 3,291 |
| | Deaths | 521 | 508 | 313 | 216 | 261 | 115 |
| Belgium | Cases | 8,080 | 6,409 | 3,914 | 2,279 | 2,353 | 1,645 |
| Bulgaria | Cases | 1,630 | 1,347 | 1,054 | 795 | 1,094 | 1,505 |
| | Deaths | 207 | 194 | 151 | 108 | 157 | 228 |
| Czechoslovakia | Cases | 4,608 | 4,872 | 4,380 | 3,223 | 3,159 | 3,548 |
| | Deaths | 554 | 637 | 470 | 327 | 231 | 232 |
| Danzig | Cases | 294 | 322 | 284 | 155 | 135 | 167 |
| | Deaths | 27 | 16 | 18 | 6 | 8 | 10 |
| Denmark | Cases | 9,904 | 13,567 | 13,945 | 7,929 | 5,692 | 5,234 |
| England and Wales | Cases | 53,918* | 69,481 | 66,506 | 52,153 | 40,009 | 41,982* |
| | Deaths | 4,888 | 5,648 | 4,772 | 4,075 | 2,772 | — |
| Esthonia | Cases | 813 | 1,207 | 825 | 517 | 408 | 461 |
| Finland | Cases | 8,851 | 6,330 | 3,941 | 1,941 | 1,787 | 1,306 |
| France | Cases | 10,009 | 14,598 | 16,981 | 12,624 | 11,033 | 11,569 |
| Germany | Cases | — | — | 63,018 | 37,949 | 31,942 | 37,248 |
| Greece | Cases | — | — | — | — | — | 192 |
| | Deaths | — | — | — | — | — | 38 |
| Hungary | Cases | — | — | 3,781 | 2,656 | 2,635 | 2,814 |
| | Deaths | — | — | 337 | 293 | 276 | 291 |
| Northern Ireland | Cases | — | — | — | — | 925 | 734 |
| | Deaths | 68 | 141 | 143 | 135 | 102 | 80 |
| Irish Free State | Deaths | — | — | — | 401 | 285 | 187 |
| Italy | Cases | 11,103 | 12,619 | 12,081 | 11,347 | 11,183 | 14,399 |
| Latvia | Cases | — | 1,159 | 964 | 698 | 645 | 594 |
| Lithuania | Cases | — | — | — | 292 | 228 | 223 |
| | Deaths | — | — | — | 15 | 12 | 4 |
| Netherlands | Cases | 10,900 | 8,091 | 7,575 | 4,740 | 4,134 | 4,447 |
| | Deaths | 745 | 352 | 375 | 309 | 231 | 237 |
| Norway (cities) | Cases | 8,365 | 3,582 | 1,952 | 850 | 826 | 639 |
| | Deaths | — | 112 | 50 | 30 | 32 | 15 |
| Poland | Cases | 1,815 | 3,178 | 4,130 | 4,228 | 3,694 | 4,838 |
| | Deaths | 219 | 387 | 544 | 414 | 426 | 494 |
| Roumania | Cases | 712 | 2,238 | 3,050 | 1,519 | 1,445 | 1,242 |
| | Deaths | 83 | 193 | 312 | 220 | 159 | 189 |

* 53 weeks only.

EUROPE *(continued)*.

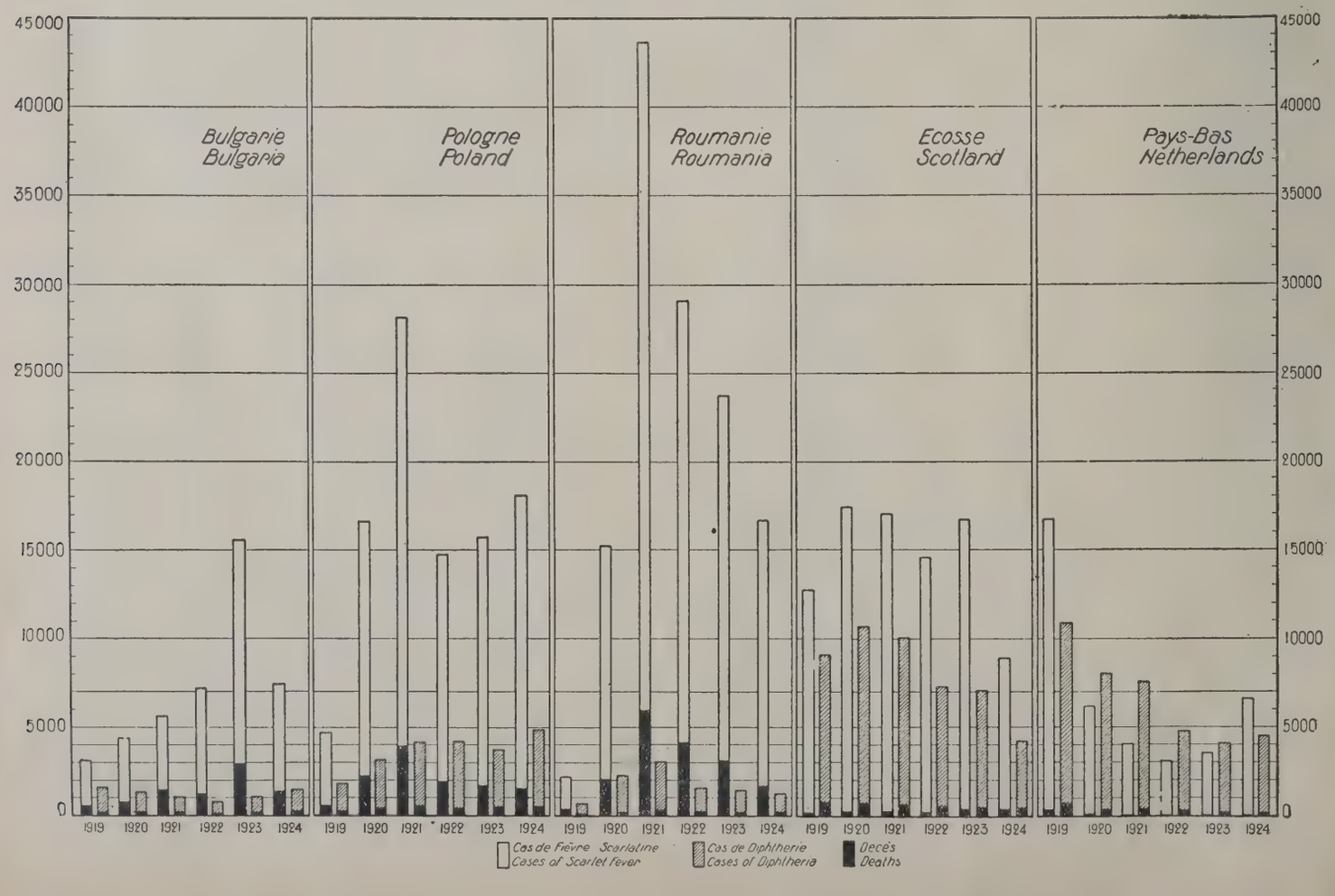
| *Country.* | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| European Russia (without Ukraine) | Cases | 29,799 | 26,333 | 24,645 | 26,710 | 27,525 | 34,791 [1] |
| Ukraine | Cases | — | — | 14,516 | 13,069 | 13,353 | 14,749 [2] |
| Saar Territory | Cases | — | — | 285 | 208 | 265 | 311 |
| | Deaths | — | — | 27 | 35 | 48 | 44 |
| Scotland | Cases | 9,078 | 10,766 | 10,112 | 7,372 | 7,106 | 4,262 |
| | Deaths | 727 | 724 | 625 | 550 | 500 | 451 |
| Kingdom of the Serbs, Croats and Slovenes. | Cases | — | 1,912 | 2,667 | 1,935 | 1,963 | 1,635 |
| | Deaths | — | 298 | 349 | 290 | 313 | 284 |
| Spain | Deaths | 2,639 | 2,723 | 3,037 | 2,878 | 2,289 | 2,029 |
| Sweden | Cases | 40,514 | 26,448 | 15,133 | 6,610 | 4,840 | 3,929 |
| Switzerland | Cases | 7,690 | 8,456 | 7,702 | 4,415 | 3,297 | 2,656 |

[1] Provisional figure.
[2] Figure for December not received.

Diphtheria in Europe remained very much as in 1923, with minor increases in some countries and corresponding decreases in others. In *Germany* the number of notifications rose in 1924 as compared with 1923. The incidence of both scarlet fever and diphtheria reached its highest point in 1921. A slight rise was noticeable in *England and Wales*, where diphtheria causes a much higher fatality than scarlet fever. In *Austria*, too, there was a slight increase in cases reported but a decided drop in mortality figures. Scarlet fever is a far greater cause of morbidity and mortality than diphtheria in *Poland*, *Roumania*, *Russia*, *Kingdom of the Serbs, Croats and Slovenes* and *Czechoslovakia*. The increase in diphtheria in *European Russia* was most marked in the following districts: Central Industrial, Western, Middle Volga and Ural.

The diagram illustrates the comparative importance of scarlet fever and diphtheria in South-Eastern and Western Europe.

Relative Incidence of Scarlet Fever and Diphtheria in various European Countries from 1919 to 1924



## MEASLES

Data received indicate a slight but by no means general decline in the incidence of measles during 1924. The disease is not completely reported in any country and definite conclusions cannot therefore be drawn from the tables given below. Interesting facts regarding the disease are the variation in its seasonal distribution in different countries, its virulence in some countries, especially where it has previously been rare, and its tendency to cause widespread epidemics periodically, the epidemic in one country culminating at a time when the disease is at a low ebb in another.

Cases of Measles and Deaths reported in certain Countries in Africa, America and Asia from 1919 to 1924.

| | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| | | | | AFRICA. | | | |
| Egypt | Cases | 3,514 | 9,244 | 3,048 | 5,607 | 17,871 | 3,606 |
| | Deaths | 1,642 | 3,753 | 1,254 | 2,583 | 7,673 | 1,750 |
| Nyasaland | Cases | — | 14 | 11 | — | 62 | 1,421 |
| Tunisia | Cases | — | — | — | — | 442 | 221 |
| | | | | AMERICA | | | |
| Canada | Cases | — | — | — | — | — | 39,974 |
| | Deaths | — | — | — | — | — | 370 |
| Ontario only | Cases | 1,988 | 15,423 | 2,851 | 8,950 | 10,843 | 25,694 |
| | Deaths | 21 | 210 | 40 | 40 | 70 | 65 |
| Cuba: Havana | Cases | 82 | 885 | 147 | 11 | 81 | 173 |
| | Deaths | 1 | 46 | 4 | 1 | 0 | 2 |
| Hawaii | Cases | — | 631 | 358 | 1,388 | 1,145 | 182 |
| Panama Canal Zone | Cases | — | — | 228 | 79 | 353 | 449 |
| United States | Cases | 179,512 | 468,048 | 282,054 | 265,915 | 744,598 | 502,146 |
| (Number of States reporting) | | (38) | (42) | (47) | (48) | (47) | (48) |
| | | | | ASIA | | | |
| Iraq | Cases | — | — | 605 | 87 | 461 | 1,466 |
| | Deaths | — | — | — | — | 120 | 787 |
| Palestine | Cases | — | — | 13 | 117 | 6,936 | — |
| | Deaths | — | — | 1 | 10 | 1,232 | — |

In *Egypt* the maximum number of cases in 1923 occurred in July, in 1924 in June. In *Canada* the maximum in 1924 occurred in May and in the *United States* in March. As a rule the maximum occurs in winter in northern countries and in summer in the south. In *Denmark*, for instance, the maximum number of cases in 1924 was reported in January, in *Italy* in April and in *Spain* in July. From the scanty data available, there does not appear, however, to be any regularity in the monthly distribution in a given country in different years. In proof of the fact that epidemics of measles rise and fall quite independently in different countries, it may be pointed out that during the period 1919 to 1924 inclusive, the largest numbers of cases were reported from *England and Wales* in 1920, from *Bulgaria* and *Italy* in 1921, from *Spain* in 1922, from *France* and *Switzerland* in 1923 and from *Denmark* in 1924.

### EUROPE.

Cases of Measles and Deaths reported from European Countries from 1919 to 1924.

| *Country* | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| Bulgaria | Cases | 9,072 | 10,772 | 25,710 | 8,700 | 10,264 | 7,393 |
| | Deaths | 367 | 402 | 1,896 | 434 | 504 | 293 |
| Denmark | Cases | 22,157 | 27,758 | 5,181 | 9,596 | 32,166 | 33,794 |
| England and Wales | Deaths | 3,534 | 7,190 | 2,241 | 5,694 | 5,316 | 3,558* |

* 105 large towns.

EUROPE *(continued)*.

| | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| Esthonia | Cases | 1,754 | 1,032 | 1,785 | 2,811 | 1,930 | 203 |
| France | Cases | 14,002 | 17,489 | 16,644 | 12,019 | 34,585 | 12,838 |
| Hungary | Cases | — | — | 51,172 | 7,465 | 16,413 | 24,906 |
| | Deaths | — | — | 1,070 | 388 | 386 | 327 |
| Northern Ireland | Cases | — | — | — | — | — | 216 |
| | Deaths | 158 | 278 | 44 | 52 | 204 | 204 |
| Irish Free State | Deaths | — | — | — | 458 | 171 | 210 |
| Italy | Cases | 56,401 | 94,223 | 96,725 | 46,471 | 75,024 | 69,239 |
| Latvia | Cases | — | 1,036 | 3,062 | 715 | 315 | 1,592 |
| Lithuania | Cases | — | — | — | — | 374 | 2,389 |
| | Deaths | — | — | — | — | 7 | 63 |
| Norway (cities) | Cases | 1,444 | 5,936 | 5,649 | 3,647 | 2,150 | 6,169 |
| | Deaths | — | 25 | 29 | 27 | 10 | 28 |
| Poland | Cases | 6,933 | 10,831 | 23,143 | 23,830 | 22,159 | 10,154 |
| | Deaths | 464 | 405 | 782 | 792 | 689 | 166 |
| Scotland | Cases | 1,510 | 2,037 | 177 | 3,266 | 554 | 14,526[a] |
| | Deaths | 889 | 816 | 269 | 2,695 | 1,118 | 1,592 |
| Kingdom of the Serbs, | Cases | — | 17,331 | 25,265 | 5,084 | 13,094 | 23,673 |
| Croats and Slovenes | Deaths | — | 495 | 589 | 203 | 219 | 342 |
| Spain | Deaths | 2,868 | 5,813 | 5,390 | 6,408 | 4,048 | 4,410 |
| Switzerland | Cases | 9,127 | 15,194 | 3,070 | 3,930 | 10,316 | 3,301 |

[a] 16 principal towns.

The seasonal incidence of measles during the year in certain European and American countries is shown in the following table.

SEASONAL DISTRIBUTION OF MEASLES IN VARIOUS COUNTRIES REPORTED BY MONTHS OR FOUR-WEEKLY PERIODS DURING 1924.

| *Country* | *Jan.* | *Feb.* | *March* | *April* | *May* | *June* | *July* | *Aug.* | *Sept.* | *Oct.* | *Nov.* | *Dec.* | *Total* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bulgaria | 813 | 1,220 | 1,134 | 646 | 728 | 649 | 236 | 100 | 20 | 273 | 749 | 825 | 7,393 |
| Denmark | 5,959 | 5,065 | 4,527 | 4,608 | 5,361 | 2,858 | 1,908 | 894 | 489 | 757 | 627 | 741 | 33,794 |
| France | 712 | 928 | 1,518 | 1,916 | 2,096 | 1,636 | 1,149 | 482 | 258 | 288 | 716 | 1,139 | 12,838 |
| Hungary | 1,977 | 1,478 | 1,849 | 1,216 | 3,025 | 2,425 | 1,321 | 607 | 634 | 2,069 | 4,140 | 4,165 | 24,906 |
| Norway (cities) | 255 | 260 | 290 | 543 | 757 | 551 | 326 | 109 | 250 | 975 | 1,204 | 649 | 6,169 |
| Switzerland | 471 | 373 | 290 | 310 | 153 | 244 | 313 | 152 | 84 | 166 | 187 | 499 | 3,242 |
| Kingdom of the Serbs, Croats and Slovenes | 2,364 | 3,843 | 5,507 | 2,537 | 2,968 | 1,840 | 638 | 219 | 442 | 766 | 990 | 1,559 | 23,673 |
| Spain (deaths) | 285 | 271 | 309 | 321 | 450 | 552 | 658 | 355 | 199 | 243 | 366 | 401 | 4,410 |

| | I | II | III | IV | V | VI | VII | VIII | IX | X | XI | XII | XIII | *Total* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Egypt | 138 | 228 | 240 | 406 | 460 | 506 | 490 | 288 | 118 | 144 | 201 | 172 | 215 | 3,606 |
| England and Wales (105 towns) Deaths | 299 | 330 | 604 | 559 | 498 | 316 | 193 | 105 | 58 | 34 | 67 | 168 | 264 | 3,495 |
| Italy | 6,322 | 6,469 | 6,976 | 9,558 | 8,697 | 6,846 | 5,397 | 4,505 | 2,072 | 1,570 | 2,061 | 3,671 | 5,095 | 69,239 |
| United States (27 St.) | 46,926 | 58,718 | 65,121 | 54,848 | 41,484 | 29,296 | 14,427 | 4,357 | 1,357 | 1,269 | 2,121 | 2,947 | 6,028[a] | 328,899[b] |

[a] 5 weeks.
[b] 53 weeks.

## WHOOPING-COUGH

No definite conclusions can be drawn from the scanty data available in regard to whooping-cough. The disease is a frequent cause of death in infants and young children, but notification is only compulsory in a few countries; moreover, figures cannot be complete, even when reporting is legally imposed, since many patients are not attended by physicians. A few cases are reported in Africa from Algeria, Nyasaland, Southern Rhodesia and Tunisia. In the United States of America, 46 States reported 147,558 cases in 1924, as compared with 161,059 in 48 States in 1923 and 106,212 cases in 43 States in 1922. The largest number of cases were reported from New York (21,619), Virginia (15,856), North Carolina (13,005), Mississippi (11,035), and Ohio (10,516).

## EUROPE

The following table represents all available data for Europe:

| *Country.* | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| Bulgaria | Cases | 3,531 | 4,696 | 4,979 | 2,277 | 3,636 | 7,765 |
| | Deaths | 154 | 266 | 340 | 199 | 212 | 459 |
| England and Wales | Deaths | 2,605 | 4,401 | 4,576 | 6,370 | 4,162 | — |
| Esthonia | Cases | 436 | 232 | 215 | 1,417 | 928 | 60 |
| Hungary | Cases | — | — | 2,656 | 2,669 | 2,736 | 5,718 |
| | Deaths | — | — | 137 | 127 | 227 | 283 |
| Irish Free State | Deaths | — | — | — | 201 | 454 | 551 |
| Northern Ireland | Deaths | 158 | 185 | 366 | 194 | 305 | 258 |
| Latvia | Cases | — | 604 | 449 | 510 | 479 | 495 |
| Norway (towns) | Cases | 4,119 | 6,116 | 2,137 | 6,185 | 4,580 | 2,457 |
| | Deaths | 32 | 53 | 31 | 80 | 38 | 14 |
| Poland | Cases | 1,126 | 3,674 | 4,356 | 8,219 | 4,367 | 4,681 |
| | Deaths | 167 | 300 | 301 | 446 | 462 | 434 |
| Roumania | Cases | 9,310 | 21,842 | 6,527 | 9,615 | 18,872 | 12,709 |
| | Deaths | 881 | 1,195 | 406 | 660 | 1,416 | 915 |
| Scotland (16 cities) | Cases | — | — | — | — | 2,804 * | 13,952 |
| Spain | Deaths | 1,749 | 3,502 | 1,558 | 1,218 | 1,974 | 2,178 |
| Kingdom of Serbs, Croats and Slovenes | Cases | — | — | — | — | 3,692 | 4,664 |
| | Deaths | — | — | — | — | 199 | 177 |
| Switzerland | Cases | 3,121 | 2,514 | 1,675 | 3,439 | 1,571 | 1,551 |

* Data for the first quarter not available.

Whooping-cough appears in epidemic form, and the number of cases increases and decreases in irregular cycles. Maxima do not occur in the same years in different countries, as may be seen from the above table. In *Roumania* the disease appears to be of some importance. In some countries the maximum number of cases occurs in the winter months, in others during the summer (as in Roumania), but there is no regularity in the seasonal distribution; at any rate, none is noticeable from the data available.

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## LEPROSY

Information regarding leprosy during 1924 has been received from only a few of the countries in which this disease is notifiable. Supplementary data have been obtained from the annual reports of different public health administrations and from the records of the Third International Conference on Leprosy held in 1923 in Strasburg.

### AFRICA.

*Algeria.* — The number of new cases notified from 1919 to 1924 was 15. During 1918 there were 120 known cases of leprosy, chiefly among immigrants, the disease being exceedingly rare among the indigenous population.

*Morocco.* — From May 1923 to June 1924, 39 new cases of leprosy were observed in the Fez district in addition to the 104 cases that have been under observation since 1920, giving a total of 143.

*Togoland.* — The estimated number of lepers in Togoland during 1924 was between three and four thousand, the Palime district being the most affected (400 lepers or 1 per cent of the population). The disease is said to be of a benign type, cases of mutilating leprosy being rare.

*Nyasaland.* — 65 fresh cases of leprosy were notified in this country during 1920–1923; data for 1924 have not yet been received. During 1921 the number of lepers was estimated at 1,000.

*Cameroons.* — The latest official report (1923) gives the number of segregated lepers as 1,483, distributed as follows:

| | *Number of Lepers.* |
|---|---|
| M'Vogo Betsi leprosarium | 500 |
| Ayos | 150 |
| Sangmelina | 247 |
| Ngalam and Yodjang | 406 |
| Six other villages | 180 |
| Total | 1,483 |

The number of segregated lepers has risen markedly since 1920:

| *Year* | *Number of segregated lepers* | *Year* | *Number of segregated lepers.* |
|---|---|---|---|
| 1920 | 613 | 1922 | 1,189 |
| 1921 | 817 | 1923 | 1,483 |

The estimated number of lepers in the Cameroons is roughly 70,000, *i.e.* 2 per cent of the population, the districts most affected being those of Ebolova (1,500) and Garona (4,860).

In *Southern Rhodesia*, where the total number of lepers was estimated at 1,000, the number of segregated lepers in the Morgenster leper settlement was 96 in 1920, 94 in 1921, 136 in 1922 and 183 in 1923; the data for 1924 are not yet available.

*Union of South Africa.* — During the year July 1st, 1923, to June 30th, 1924, 53 new cases were notified, as compared with 87 in the preceding twelve months. 2,163 lepers (1,271 males, 892 females) were segregated at the end of the year 1923 in the following institutions:

| | Lepers. | | |
|---|---|---|---|
| *Institution* | *Males* | *Females* | *Total.* |
| Robben Island | 174 | 114 | 288 |
| Pretoria | 512 | 329 | 841 |
| Amaticula | 203 | 139 | 342 |
| Emjanyana | 266 | 223 | 489 |
| Mkambati | 70 | 50 | 120 |
| Bochem | 46 | 37 | 83 |
| Total | 1,271 | 892 | 2,163 |

The number of lepers not segregated in the Union — most of them natives — considerably exceeds 1,000. Among the 2,163 segregated at the end of the year 1923, 143 were white, 1,846 native, 168 coloured and 6 Asiatic. The disease is said to occur in sporadic forms or in small family or local groups, throughout the Union, being especially common in the Transkeian territory.

## AMERICA.

*North America.*

*Canada.* — In 1924 there were 10 lepers in the Tracadie Lazaret, N.B., and 9 in that at Bentick Island, B.C. Thirty-four cases of leprosy were admitted between 1844 and 1922. A system of voluntary isolation exists in Canada, and a slow decrease has taken place in the number of cases of leprosy from 1875 to 1924.

*United States.* — 62 cases of leprosy were notified in 1924 as compared with 54 (14 States) in 1923. During 1924, California reported 22 new cases, Louisiana 15, Illinois 7, Florida 7. The number of lepers in the United States, according to the reports of the United States Public Health Service (1922), is certainly not less than 500, with the principal foci on the Pacific Coast (Asiatic) in the north-west, in the States round the Gulf of Mexico and on the Atlantic Coast. There is a National Leprosarium in Carville, La., which during 1923 housed 173 patients.

Cases at the Federal Leprosarium, Carville, La.

| *Year* | *Admitted* | *Died* | *Discharged* | *Absconded* |
|---|---|---|---|---|
| 1921 | 136 | 11 | 6 | 18 |
| 1922 | 92 | 5 | 3 | 10 |
| 1923 | 19 | 14 | 0 | 7 |
| 1924 (to October 1st) | 50 | 6 | 3 | 4 |
| Total | 297 | 36 | 12 | 39 |

Out of the 172 lepers isolated during 1923 in the National Leprosarium, 13 per cent were blind, while in only 30 per cent was the vision unimpaired.

*Central America.*

*Mexico.* — Forty-three deaths from leprosy were reported during the first half of 1923, and in 1924 there were 78 deaths from this disease. No information is available regarding the total number of lepers.

*British Honduras.* — During 1917–1923, 21 new cases of leprosy were notified.

*Panama Canal Zone.* — The Sanitary Code of the Panama Canal Zone (1916) provides for compulsory segregation in the Palo Seco Colony of all diagnosed lepers — an agricultural establishment, where products are bought from the patients. At the end of 1923 there were 81 lepers in the Colony (7 white, 74 black), the number of new cases notified during 1921 to 1924 being 51 (21 in 1924).

*West Indies.*

*Cuba.* — The number of lepers segregated at the beginning of 1924 in the Leprosarium situated 30 kilometres from Havana was 172 (118 men, 37 women, 17 children). The total number of lepers in Cuba has been estimated (M. Primelles, Havana) at 1,500.

No recent information is available from *Jamaica* (319 lepers in 1921, 2 new cases in 1923), *Porto Rico* (44 lepers in 1922), 22 white, 22 negroes), *Santo Domingo* (10 cases in 1923), *Santa Lucia* (39 cases in 1921), *Grenada* (18 cases in 1922), *St. Christopher* and *Nevis* (83 cases in 1923), *St. Vincent* (18 cases in 1923), *Barbados* (164 cases in 1921), or *Trinidad*, where 157 cases were segregated in the settlement *Chacachaion* in 1923, and 500 in the leper asylum *Cocorite*.

*South America.*

*Argentine Republic.* — Twenty-six deaths were ascribed to leprosy in 1924, as against 28 in 1923. Leprosy is stated to be widespread in the country, but no official figures as to the total number of cases are available.

*Brazil.* — The only recent official information concerning deaths assigned to leprosy comes from the Federal District of Rio de Janeiro and Sao Paolo State.

Deaths from Leprosy during 1919–1924.

| | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 (6 months only) |
|---|---|---|---|---|---|---|
| Federal District of Rio de Janeiro | 29 | 28 | 44 | 40 | 42 | 22 |
| Sao Paolo State . . . . . | 123 | 157 | 165 | 150 | — | — |

The latest official record of lepers in Brazil is for the year 1922, when there were 7,224 known cases of leprosy in the country, the highest numbers being reported from Sao Paolo State (3,128), Para State (1,452), Minas Geraes (601), and the Federal District of Rio de Janeiro (456). Of the 456 lepers in Rio de Janeiro, about 200 were segregated in two hospitals, the remainder living at home under medical supervision.

It may be mentioned that the leprosy regulations enforced by the Brazilian Government in 1921 provide for:

1. Obligatory declaration of leprosy.
2. Agricultural colonies, sanatoria and hospitals for lepers.
3. Asylums for serious cases.

*Uruguay.* — From 1890 to 1924, 320 cases of leprosy with 143 deaths were notified in the Republic, the number of new cases reported from 1919 to 1924 inclusive being 14 and the deaths 28.

## ASIA.

The only recent information about leprosy in Asia is to be found in the annual reports of a few of the countries in which leprosy exists.

*Cyprus.* — There were 82 lepers on the leper farm during 1923, as compared with 78 and 79 in the years 1922 and 1921 respectively. The number of deaths from leprosy from 1919 to 1920 was 43.

*Ceylon.* — At the end of 1922, 503 lepers were segregated in the Hendala Leper Asylum and 116 in Mantion Island, giving the total of 619. 294 were admitted during 1923 and 82 died, giving a total of 633 in the asylum at the end of 1923.

*Federated Malay States.* — At the end of 1923, *Kuala Lumpur Asylum* accommodated 348 lepers, *Pulau Pangkor Laut* (for Malays only) 61; in addition, the *Taiping Leper Wards* treated 126 cases.

*Unfederated Malay States.* — *Kelantan:* There were 9 lepers at the beginning of 1923 in the leper camp in Kota Bharu; 7 more cases were admitted during the year, 5 absconded and 2 died.

*Seychelles.* — It is estimated that there were about 40 lepers in the Colony (1923), 25 of whom were segregated in the little island close to Praslin (convict, vagrant and pauper lepers).

*Straits Settlements.* — The number of cases in the Leper Asylum at Singapore at the end of 1923 was 47 males and 39 females. Fourteen deaths had occurred among the inmates during the year.

During 1920, 53 cases were treated in the Female Leper Ward at Penang. 559 lepers were segregated in the leper asylum at Pulau Jerejak at the end of 1923, of whom 172 came from Perak, 91 from Selangor and 28 from Kedah.

During 1923 there were 688 lepers in the asylums: 498 had been admitted in 1922, 190 were admitted in 1923, in which year 140 (20.34 per cent) died. The daily average number of patients in 1923 was 517. 230 of these patients were Cantonese, 134 Kheh, and 102 Hokkien.

## AUSTRALASIA.

*Fiji Islands.* — The Makogai Leper Asylum, which, at the end of 1920, contained 242 lepers, admitted 62 new patients during 1923, of whom 30 per cent presented themselves voluntarily. Seventeen patients were discharged on parole with the disease apparently cured, and 289 still remained at the end of 1923. Since the Asylum was opened in November 1911, 844 patients have been admitted. Of these, 192 have died, 78 have been discharged as free from active disease, and 285 have been repatriated to India.

*Hawaii.* — Information received from the Leprosy Bureau of Hawaii gives the numbers of patients on June 30th, 1924, as follows:

Number of Leprosy Patients.

| *Area* | *Male* | *Female* | *Total* | *Remarks* |
|---|---|---|---|---|
| Settlement of Molokai . . . . . | 324 | 161 | 485 | 270 Hawaiians, 96 with Hawaiian blood. |
| Kalihi Hospital, Honolulu . . . . . | 85 | 54 | 139 | 50 Hawaiians, 22 Japanese. |
| Kalihi Boys' Home, Honolulu . . . | 50 | — | 50 | Children of leprous parents. |
| Kapioloni Girls' Home, Honolulu . | — | 75 | 75 | Do. |

The incidence of leprosy in Hawaii has undoubtedly diminished very much during the last forty years, but admissions have become more numerous in recent years. It is believed that this increase may be due in part to voluntary declaration by lepers now that it is known that the disease can be checked by treatment and that segregation is not necessarily of life-long duration.

Admissions to Molokai, 1917–1924.

| *Year* | *New cases* | *Re-admissions* | *Total.* |
|---|---|---|---|
| 1919 . . . . . | 98 | 2 | 100 |
| 1920 . . . . . | 98 | 4 | 102 |
| 1921 . . . . . | 100 | 18 | 118 |
| 1921–22* . . . . . | 83 | 23 | 106 |
| 1922–23* . . . . . | 73 | 16 | 89 |
| 1923–24* . . . . . | 72 | 17 | 89 |

* Fiscal years ending June 30th.

## EUROPE.

The following countries notified new cases of leprosy during 1923 and 1924:

| | 1923 | 1924 | | 1923 | 1924 |
|---|---|---|---|---|---|
| Austria . . . . . | 1 | 0 | Greece . . . . . | — | 31 |
| Esthonia . . . . . | 34 | 13 | Latvia . . . . . | 37 | 16 |
| France . . . . . | 1 | 6 | Lithuania . . . | 1 | 0 |

*Esthonia.* — The number of cases notified in Esthonia during recent years is as follows:

| *Year* | *Male* | *Female* | *Total* | *Year* | *Male* | *Female* | *Total* |
|---|---|---|---|---|---|---|---|
| 1919 . . | 12 | 23 | 35 | 1922 . . | 12 | 25 | 37 |
| 1920 . . | 8 | 30 | 38 | 1923 . | — | — | 34 |
| 1921 . . | 20 | 29 | 49 | 1924 . . | — | — | 13 |

The number of known lepers in 1923 was about 350, of which 219 (or 62 per cent) were isolated in four leprosaria.

*France.* — Isolated cases appear from time to time in Brittany and the Alpes Maritimes; the number of persons returning infected from the colonies cannot be accurately stated.

*Greece.* — Twenty-one new cases were notified during 1924. Lepers are known to be numerous in Macedonia, Thasos and Crete.

*Latvia.* — 226 lepers were registered in 1923, 214 of whom were isolated in three leprosaria. Sixteen new cases were notified in 1924, as against 37 in 1923.

*Spain.* — Official data received up to March 1924 give the number of lepers in Spain as 579, of which 228 were isolated in leprosaria, 20 in their homes. Cases of leprosy are found chiefly in four centres: Eastern (Castille, Valencia, Alicante, Catalan provinces), Andalusia (Andalusian district including Badajoz), Galicia, and the Canary Islands, the most severely infected district being the Province of Galicia.

## TRACHOMA

Notification of trachoma is most complete in those countries where the disease is not a serious public health problem. In countries where trachoma is known to affect a large proportion of the population, data are not available. The disease is detected in hospitals and dispensaries, by medical inspection of immigrants and school-children and by special surveys. Furthermore it is a chronic disease, and its complications, which may result in impaired vision and blindness, appear gradually, hence patients sometimes do not seek treatment until the disease is advanced. In order to detect the early stages, routine inspection of such groups as immigrants, school-children and industrial workers is required. In 1924, Tunisia was the only African country reporting cases (102). In America, cases were reported from the United States (30 States reported 3,260 cases), the Panama Canal Zone (Colon, 4 cases) and Uruguay (2 cases). From Australasia, New Zealand reported 20 cases.

In *Canada*, cases are detected by the immigration service, 11 mild cases being admitted during the fiscal year ending March 31st, 1923. The health authorities of Saskatchewan report that the disease is prevalent in Russian and German settlements. In the *United States*, immigrants with trachoma have been excluded since 1897, and victims of the disease are barred at foreign as well as domestic ports. The principal foci of trachoma in America are the industrial cities, the most backward and inaccessible mountain regions of Kentucky, Tennessee, North and South Carolina, Virginia and West Virginia, etc. and the Indian reservations. The incidence of the disease varies from under one per cent in the more advanced States, where practically all cases are found among arrivals from infected areas, to twelve or thirteen per cent in the most seriously affected mountain regions. The United States Public Health Service maintains a special division for the prevention of trachoma, and many State health administrations possess such bureaux. Seven hospitals are maintained exclusively for the treatment of trachoma cases by the United States Public Health Service in Kentucky (3), North Dakota (1), Tennessee (1), Arkansas (1), and Georgia (1). Extensive surveys are carried out and numerous field clinics organised by the technical personnel of these hospitals.

Cases of Trachoma reported in the United States in 1924.

| | | | | | |
|---|---|---|---|---|---|
| Arizona . . . . . | 407 | Mississippi . . . . . | 173 | Ohio . . . . . | 161 |
| California . . . . . | 1,065 | Missouri . . . . . | 689 | Tennessee . . . . . | 139 |

The balance of the 3,260 cases reported in 1924 were widely scattered, no one State reporting more than 100 cases.

The following cases were reported in Europe during 1924:

| | 1922 | 1923 | 1924 |
|---|---|---|---|
| Austria | 320 | 379 | 341 |
| Czechoslovakia | 2,739 | 3,338 | 2,782 |
| Dantzig | 11 | 15 | 54 |
| Esthonia | 467 | 513 | 528 |
| Finland | — | — | 74 |
| Germany | 1,522 | 1,192 | 1,784 |
| Lithuania | — | 1,764 | 2,375 |
| Poland | 2,737 | 4,061 | 2,954 |

The war revealed the incidence of trachoma among conscripts, which resulted, in some countries at least, in energetic measures being taken for its treatment and prevention. On the other hand, mass movements due to war and famine may have spread trachoma to new areas. The bad economic conditions following the war doubtless provided a fruitful soil for its propagation.

The incomplete character of notification of trachoma is shown by the following facts gathered from official reports.

Between 9,000 and 10,000 cases of trachoma were treated at the special hospitals maintained by the *United States* Public Health Service (1913–1919). In addition, several thousands were located and treated at field clinics.

In *Porto Rico* (1914), of 4,202 school-children examined, 10 per cent were suffering from trachoma.

In *Esthonia* in 1924, 8 per cent of the students at Dorpat were said to have trachoma, in the Army 1 per cent and in the asylums 17 per cent.

In 1917 a commission in the Netherlands formed to study trachoma in the Amsterdam schools reported 1,019 cases among 73,480 children examined.

*Russia.* — Conditions in Russia appear to be very bad as regards trachoma. The director of the Trachoma Institute at Kazan states that the disease is extremely prevalent in the provinces of the Volga-Kama, and that Kazan is the centre of a vast and seriously infected region. Of 2,427,000 persons examined, 423,000, or 17 per cent, had trachoma in the government of Kazan. More than 25 per cent of the eye diseases treated in the clinic of the University of Kazan were trachoma. In some districts from 50 per cent to 75 per cent of the population is affected.

*Spain.* — In Spain, trachoma is said to be prevalent, especially in Murcia and Saragossa. According to Dr. Jenaro Gonzalez, it prevails to an alarming extent along the Mediterranean coast; in some districts more than 25 per cent of the population are affected.

*France.* — The *Bulletin* of the Office international d'Hygiène publique (1917) published an account of trachoma among colonial workers in France, showing that 40 per cent of African and 15 per cent of Asiatic workers were trachomatous.

*Palestine.* — Trachoma is prevalent in Palestine, and, according to official reports, affects 95 per cent of the school-children in some districts.

*Iraq.* — Sufferers from trachoma form 60 to 80 per cent of the population according to a report on the Iraq Administration (H.M. Stationery Office, London, 1923).

*Annam.* — The *Bulletin* of the Office international d'Hygiène publique (March 1923) states that, of 13,509 pupils examined, 4,195, or 31 per cent, had trachoma. According to the same source (April 1924), trachoma is exceedingly common in *China*, from 20 per cent to 60 per cent of the population being affected. In *Japan*, according to Dr. M. Tsurumi, from 4 to 35 per cent of the school-children have trachoma.

In *Egypt*, the Annual Report of the Ophthalmic Section, Department of Public Health ,states (1921): "chronic trachoma affects more than 95 per cent of the population".

## ANTHRAX

The highest number of anthrax cases in Europe during 1924 are those reported from *Russia* (6,929 cases) and the *Ukraine* (4,848), as against 4,450 and 2,309 respectively in 1923. Other European countries reported as follows:

| | *Cases* | *Deaths* | | *Cases* | *Deaths* | | *Cases* | *Deaths* |
|---|---|---|---|---|---|---|---|---|
| Austria | 7 | 2 | Germany | 118 | — | Lithuania | 2 | — |
| Czechoslovakia | 67 | 7 | Hungary | 7 | — | Poland | 69 | 17 |
| Denmark | 8 | — | Italy | 2,728* | — | Switzerland | 2 | — |
| Finland | 4 | — | Latvia | 4 | — | | | |

* 2,205 in 1923.

The number of cases reported for the whole of the *Russian Federation* during 1924 was 12,925, distributed as follows:

CASES OF ANTHRAX REPORTED IN RUSSIA, BY QUARTERS, IN 1923 AND 1924.

| *Division* | *Year* | *1st quarter* | *2nd quarter* | *3rd quarter* | *4th quarter* | *Total* |
|---|---|---|---|---|---|---|
| European Russia | 1923 | 645 | 660 | 2,066 | 1,079 | 4,450 |
| | 1924 | 884 | 1,208 | 3,499 | 1,338 | 6,929 |
| Ukraine | 1923 | 200 | 260 | 1,121 | 727 | 2,309 |
| | 1924 | 523 | 772 | 2,579 | * 974 | * 4,848 |
| Transcaucasia | 1923 | 14 | 78 | 104 | 89 | 285 |
| | 1924 | 7 | 12 | 120 | 75 | 214 |
| Siberia and Far-Eastern Republic | 1923 | 59 | 50 | 172 | 62 | 342 |
| | 1924 | 78 | 78 | 278 | 29 | 403 |
| Kirghiz Republic and Turkestan | 1923 | 65 | 14 | 130 | 61 | 270 |
| | 1924 | 67 | 31 | 243 | — | 341 |
| Total for Waterways | 1923 | 51 | 37 | 38 | 19 | 145 |
| | 1924 | 24 | 15 | 62 | 29 | 130 |
| Total for all Russia | 1923 | 1,034 | 1,099 | 3,631 | 2,037 | 7,801 |
| | 1924 | 1,583 | 2,116 | 6,781 | 2,445 | 12,925 |

* Data tor December 1924 missing.

The *Union of South Africa* reported 35 cases during 1924. No information has been received from any other African country. *Uruguay* reported 103 cases and 20 deaths in 1924, as against 186 cases and 31 deaths in 1923. In the *United States*, 170 cases were notified from 18 States during 1924, as compared with 147 cases from 20 States in 1923. Ten cases were reported from *Turkey* in 1924.

STATISTICS OF NOTIFIABLE DISEASES IN 1924.

# TABLES

# AFRIQUE — AFRICA

## ALGÉRIE — ALGERIA

(Population: 5 806 090. R. 6 mars 1921.)

**Nombre de cas de maladies à déclaration obligatoire déclarés en 1920-1924; par mois en 1924.**
**Number of Cases of Notifiable Diseases reported in 1920-1924; by months in 1924.**

*Sources:* Bulletin Sanitaire de l'Algérie, 1921-1924. Rapport spécial pour l'année 1920. — Special Report for 1920.

| Maladie — Disease | Total 1920 | Total 1921 | Total 1922 | Total 1923 | Total 1924 | Janv. Jan. | Fév. Feb. | Mars Mar. | Avril April | Mai May | Juin June | Juil. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conjonctivite purul. et ophtalmie granuleuse — Purul. conjunctivitis and granulous ophthalmia | 1 | 0 | 1 | 6 | 17 *a* | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 |
| Coqueluche — Whooping-cough | 26 | 18 | 20 | 50 | 25 | 3 | 2 | 4 | 0 | 1 | 7 | 1 | 1 | 1 | 3 | 2 | 0 |
| Diphtérie — Diphtheria | 192 | 726 | 370 | 439 | 575 | 54 | 25 | 26 | 31 | 26 | 29 | 44 | 43 | 82 | 78 | 56 | 67 |
| Dysenterie — Dysentery | 12 | 41 | 118 | 306 | 139 | 3 | 3 | 3 | 0 | 1 | 9 | 41 | 27 | 15 | 11 | 11 | 15 |
| Encéphalite létharg. — Encephalitis letharg. | 20 | 11 | 13 | 7 | 4 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| Erysipèle — Erysipelas | 25 | 38 | 30 | 29 | 50 | 6 | 4 | 5 | 1 | 3 | 4 | 1 | 2 | 2 | 12 | 6 | 5 |
| Fièvre méditerran. — Mediterranean fever | 7 | 18 | 11 | 9 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 2 |
| Fièvre récurrente — Relapsing fever | 2 | 18 | 5 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fièvre typhoïde — Enteric fever | 820 | 1288 | 751 | 712 | 750 | 68 | 67 | 24 | 30 | 44 | 65 | 59 | 54 | 74 | 110 | 89 | 68 |
| Grippe — Influenza | 288 | 204 | 944 | 411 | 181 | 100 | 58 | 38 | 2 | 0 | 1 | 0 | 0 | 1 | 1 | 3 | 11 |
| Infections puerpérales — Puerperal infections | 17 | 12 | 33 | 19 | 11 | 1 | 1 | 1 | 1 | 2 | 0 | 1 | 1 | 1 | 0 | 0 | 2 |
| Lèpre — Leprosy | 5 | 1 | 4 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Maladies à trypanosome et à pyroplasmes — Trypanosomiasis and Kala-azar | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Maladies cholériformes — Cholera nostras | 3 | 2 | 32 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Méningite cérébro-spinale épidém. — Epidemic cerebro-spinal meningitis | 25 | 31 | 61 | 61 | 38 | 5 | 3 | 5 | 5 | 4 | 5 | 1 | 0 | 2 | 1 | 2 | 5 |
| Oreillons — Mumps | 43 | 358 | 395 | 919 | 875 | 60 | 190 | 189 | 61 | 26 | 12 | 13 | 3 | 7 | 10 | 46 | 246 |
| Paludisme — Malaria | 8 | 156 | 206 | 231 | 148 | 8 | 12 | 3 | 2 | 14 | 17 | 14 | 27 | 16 | 18 | 9 | 9 |
| Peste — Plague | 32 | 195 | 49 | 6 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 1 | 0 | 0 | 2 | 0 |
| Pneumonie et broncho-pneumonie — Pneumonia and broncho-pneumonia | 423 | 736 | 1563 | 1226 | 392 | 37 | 23 | 10 | 13 | 8 | 9 | 12 | 13 | 20 | 17 | 30 | 56 |
| Poliomyélite aiguë — Acute poliomyelitis | 1 | 13 | 2 | 5 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rougeole — Measles | 296 | 726 | 1647 | 692 | 650 | 80 | 158 | 229 | 86 | 20 | 22 | 10 | 7 | 1 | 2 | 12 | 51 |
| Scarlatine — Scarlet fever | 103 | 87 | 111 | 163 | 219 | 7 | 14 | 8 | 12 | 18 | 34 | 34 | 5 | 17 | 19 | 20 | 24 |
| Suette miliaire — Miliary fever | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Teigne — Thrush | 1 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tuberculose pulmon. — Pulmon. tuberculosis | 485 | 1171 | 1416 | 1323 | 831 | 56 | 50 | 62 | 53 | 59 | 37 | 60 | 56 | 47 | 54 | 53 | 69 |
| Typhus exanthém. — Typhus | 1078 | 6360 | 1233 | 1666 | 471 | 39 | 89 | 102 | 90 | 70 | 44 | 18 | 17 | 18 | 15 | 11 | 13 |
| Varicelle — Chickenpox | — | — | — | — | 129 | 0 | 0 | 3 | 1 | 3 | 4 | 63 | 9 | 2 | 21 | 20 | 3 |
| Variole — Smallpox | 1172 | 755 | 184 | 141 | 483 | 7 | 19 | 8 | 7 | 10 | 12 | 8 | 5 | 61 | 67 | 111 | 156 |

Pas de cas de choléra asiatique ou de fièvre jaune, 1920-1924. — No case of Asiatic cholera or yellow fever, 1920-1924.

*a*) Les données mensuelles sont provisoires ; les totaux annuels sont corrigés. — Monthly data are provisional ; annual data are corrected.

## BASSOUTOLAND — BASUTOLAND

(Population: 498 781. R. mai 1921.)

**Nombre de cas de certaines maladies infectieuses et de décès causés par ces maladies déclarés en 1921-1924; par périodes de quatre semaines en 1924**
**Number of Cases of and Deaths from Certain Infectious Diseases reported in 1921-1924; by four-week periods in 1924.**

*Sources:* Rapports périodiques du Ministère britannique de Santé, 1923-1924.
Current Reports from British Ministry of Health, 1923-1924. The Lancet, London, March 10th, 1923, and January 5th, 1924.

| Période de quatre semaines finissant le: Four-week period ending: | Dysenterie Dysentery | | Grippe Influenza | | Méningite cérébro-spinale Cerebro-spinal meningitis | | Pneumonie Pneumonia | | Typhus exanthématique Typhus | | Variole Smallpox | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. |
| Total 1921 | 187 | 14 | 963 | 2 | — | — | 79 | 2 | 503 | 93 | 521 | 53 |
| Total 1922 | 89 | 2 | 530 | 2 | 4 | — | 77 | 6 | 402 | 70 | 421 | 46 |
| Total 1923 | 56 | 1 | 337 | 0 | 8 | 1 | 106 | 2 | 958 | 120 | 671 | 14 |
| Total 1924 | 112 | 0 | 670 | 0 | 3 | 2 | 149 | 2 | 500 | 62 | 474 | 22 |
| Janvier—January 26 | 6 | 0 | 35 | 0 | 0 | 0 | 8 | 0 | 41 | 3 | 76 | 0 |
| Février—February 23 | 14 | 0 | 23 | 0 | 0 | 0 | 8 | 0 | 65 | 27 | 96 | 4 |
| Mars—March 22 | 8 | 0 | 12 | 0 | 1 | 1 | 2 | 0 | 33 | 5 | 21 | 1 |
| Avril—April 19 | 6 | 0 | 17 | 0 | 0 | 0 | 3 | 0 | 78 | 3 | 98 | 3 |
| Mai—May 17 | 6 | 0 | 26 | 0 | 0 | 0 | 9 | 0 | 45 | 1 | 42 | 3 |
| Juin—June 14 | 5 | 0 | 21 | 0 | 0 | 0 | 6 | 0 | 9 | 0 | 43 | 1 |
| Juillet—July 12 | 1 | 0 | 15 | 0 | 0 | 0 | 10 | 0 | 42 | 2 | 27 | 1 |
| Août—August 9 | 1 | 0 | 53 | 0 | 1 | 1 | 16 | 0 | 71 | 9 | 17 | 2 |
| Septembre—September 6 | 2 | 0 | 215 | 0 | 1 | 0 | 15 | 0 | 82 | 9 | 18 | 1 |
| Octobre—October 4 | 3 | 0 | 135 | 0 | 0 | 0 | 16 | 1 | 12 | 0 | 6 | 1 |
| Novembre—November 1 | 6 | 0 | 46 | 0 | 0 | 0 | 16 | 0 | 9 | 2 | 11 | 1 |
| 29 | 30 | 0 | 43 | 0 | 0 | 0 | 16 | 0 | 11 | 1 | 12 | 3 |
| Décembre—December 27 | 24 | 0 | 29 | 0 | 0 | 0 | 24 | 1 | 2 | 0 | 7 | 1 |

Pas de cas de choléra asiatique, de peste ou de fièvre jaune, 1921-1924. — No case of Asiatic cholera, plague or yellow fever, 1921-1924.

## ÉGYPTE — EGYPT (Population: 13 800 000. E. 30 juin 1924.

**Nombre de cas de maladies à déclaration obligatoire et de décès dus à ces maladies déclarés en 1919-1924; par semaines en 1924.**
**Number of Cases of and Deaths from Notifiable Diseases reported in 1919-1924; by weeks in 1924.**

*Source:* Weekly Return of Births, Deaths and Infectious Diseases.

| Année et semaine finissant le: Year and week ending: | | Diphtérie Diphtheria | | Fièvre typhoïde Enteric fever | | Méningite céré.-spin. Cere.-spinal meningitis | | Peste Plague | | Rougeole Measles | | Scarlatine Scarlet fever | | Typhus exanthém. Typhus | | Varicelle Chickenpox | | Variole Smallpox | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. |
| Total 1919 | | 977 | 347 | 2707 | 587 | 85 | 52 | 877 | 473 | 3514 | 1642 | 206 | 15 | 16986 | 5573 | 458 | 28 | 7928 | 1938 |
| Total 1920 | | 810 | 316 | 1799 | 426 | 43 | 28 | 463 | 269 | 9244 | 3753 | 135 | 19 | 13253 | 3510 | 453 | 9 | 3021 | 805 |
| Total 1921 | | 873 | 336 | 1380 | 346 | 43 | 19 | 358 | 153 | 3048 | 1254 | 166 | 15 | 4487 | 1271 | 372 | 1 | 93 | 24 |
| Total 1922 | | 959 | 422 | 1689 | 437 | 41 | 25 | 487 | 228 | 5607 | 2583 | 134 | 3 | 2489 | 723 | 337 | 0 | 309 | 90 |
| Total 1923 | | 1137 | 464 | 1765 | 466 | 44 | 37 | 1519 | 725 | 17871 | 7673 | 107 | 5 | 1935 | 603 | 522 | 13 | 519 | 145 |
| Total 1924 | | 1545 | 689 | 1794 | 462 | 18 | 13 | 373*a* | 193*a* | 3606 | 1750 | 164 | 8 | 1683 | 588 | 416 | 10 | 799 | 221 |
| Janvier — January | 7 | 32 | 12 | 29 | 1 | 0 | 0 | 6 | 4 | 24 | 6 | 2 | 0 | 18 | 12 | 3 | 0 | 9 | 4 |
| | 14 | 22 | 10 | 27 | 5 | 2 | 2 | 2 | 2 | 26 | 10 | 2 | 0 | 12 | 1 | 11 | 0 | 5 | 3 |
| | 21 | 29 | 10 | 40 | 8 | 2 | 2 | 6 | 1 | 29 | 15 | 3 | 0 | 36 | 17 | 14 | 0 | 10 | 3 |
| | 28 | 24 | 10 | 21 | 6 | 1 | 0 | 3 | 2 | 59 | 31 | 7 | 0 | 14 | 8 | 12 | 0 | 8 | 2 |
| Février — February | 4 | 18 | 4 | 29 | 6 | 0 | 0 | 10 | 7 | 68 | 24 | 1 | 0 | 17 | 5 | 8 | 0 | 15 | 2 |
| | 11 | 14 | 5 | 15 | 7 | 0 | 0 | 5 | 5 | 59 | 30 | 4 | 0 | 12 | 8 | 4 | 0 | 9 | 1 |
| | 18 | 21 | 8 | 9 | 3 | 0 | 0 | 6 | 3 | 48 | 15 | 9 | 1 | 15 | 6 | 10 | 0 | 5 | 2 |
| | 25 | 12 | 4 | 9 | 5 | 0 | 0 | 1 | 0 | 53 | 14 | 3 | 1 | 16 | 6 | 12 | 0 | 6 | 3 |
| Mars — March | 4 | 14 | 5 | 24 | 8 | 0 | 0 | 0 | 0 | 79 | 12 | 5 | 0 | 25 | 14 | 23 | 0 | 25 | 4 |
| | 11 | 17 | 9 | 14 | 2 | 1 | 1 | 2 | 2 | 38 | 19 | 7 | 1 | 35 | 15 | 12 | 0 | 26 | 8 |
| | 18 | 12 | 6 | 20 | 5 | 1 | 0 | 2 | 1 | 53 | 14 | 2 | 0 | 37 | 9 | 20 | 0 | 13 | 4 |
| | 25 | 14 | 5 | 25 | 5 | 0 | 0 | 2 | 0 | 70 | 30 | 7 | 1 | 54 | 12 | 18 | 0 | 22 | 2 |
| Avril — April | 1 | 15 | 7 | 22 | 4 | 1 | 0 | 5 | 3 | 63 | 26 | 7 | 0 | 57 | 15 | 18 | 0 | 27 | 11 |
| | 8 | 16 | 7 | 21 | 5 | 0 | 0 | 14 | 5 | 114 | 34 | 6 | 0 | 81 | 20 | 18 | 0 | 45 | 5 |
| | 15 | 23 | 10 | 28 | 9 | 1 | 1 | 28 | 20 | 81 | 37 | 6 | 1 | 67 | 24 | 22 | 0 | 22 | 8 |
| | 22 | 18 | 12 | 21 | 4 | 2 | 2 | 20 | 12 | 148 | 63 | 4 | 0 | 71 | 35 | 18 | 1 | 33 | 10 |
| | 29 | 19 | 8 | 14 | 4 | 1 | 2 | 58 | 18 | 118 | 57 | 10 | 0 | 84 | 23 | 19 | 0 | 44 | 17 |
| Mai — May | 6 | 21 | 12 | 22 | 3 | 0 | 0 | 33 | 17 | 109 | 56 | 7 | 0 | 48 | 20 | 9 | 1 | 17 | 9 |
| | 13 | 26 | 7 | 31 | 8 | 0 | 0 | 21 | 14 | 117 | 61 | 5 | 0 | 51 | 8 | 19 | 0 | 43 | 5 |
| | 20 | 20 | 7 | 37 | 8 | 0 | 0 | 14 | 7 | 116 | 65 | 8 | 1 | 100 | 21 | 18 | 0 | 28 | 12 |
| | 27 | 10 | 5 | 30 | 7 | 0 | 0 | 13 | 2 | 130 | 62 | 4 | 0 | 78 | 20 | 23 | 2 | 33 | 11 |
| Juin — June | 3 | 13 | 7 | 39 | 10 | 1 | 0 | 12 | 5 | 130 | 72 | 7 | 0 | 65 | 20 | 13 | 0 | 21 | 7 |
| | 10 | 22 | 9 | 34 | 5 | 0 | 0 | 21 | 10 | 107 | 65 | 6 | 0 | 53 | 18 | 11 | 0 | 34 | 8 |
| | 17 | 20 | 9 | 41 | 16 | 1 | 1 | 14 | 7 | 139 | 113 | 5 | 0 | 51 | 14 | 13 | 0 | 28 | 6 |
| | 24 | 17 | 3 | 41 | 6 | 1 | 0 | 15 | 8 | 164 | 100 | 2 | 0 | 47 | 15 | 8 | 0 | 22 | 5 |
| Juillet — July | 1 | 32 | 16 | 37 | 9 | 0 | 0 | 7 | 5 | 142 | 99 | 1 | 0 | 32 | 15 | 5 | 0 | 19 | 1 |
| | 8 | 25 | 13 | 56 | 11 | 0 | 0 | 3 | 2 | 96 | 56 | 3 | 0 | 31 | 10 | 3 | 4 | 11 | 0 |
| | 15 | 22 | 12 | 53 | 14 | 0 | 0 | 5 | 3 | 88 | 76 | 0 | 0 | 23 | 12 | 2 | 0 | 2 | 2 |
| | 22 | 27 | 8 | 69 | 17 | 0 | 0 | 8 | 3 | 143 | 89 | 0 | 0 | 37 | 16 | 0 | 0 | 12 | 3 |
| | 29 | 25 | 9 | 78 | 9 | 0 | 0 | 4 | 1 | 61 | 37 | 3 | 1 | 25 | 13 | 1 | 0 | 13 | 2 |
| Août — August | 5 | 24 | 19 | 52 | 14 | 0 | 0 | 4 | 3 | 35 | 21 | 2 | 0 | 16 | 5 | 1 | 0 | 8 | 3 |
| | 12 | 28 | 10 | 60 | 23 | 0 | 0 | 3 | 3 | 49 | 31 | 1 | 0 | 21 | 9 | 0 | 0 | 9 | 4 |
| | 19 | 23 | 8 | 41 | 13 | 0 | 0 | 0 | 0 | 29 | 16 | 0 | 1 | 42 | 15 | 2 | 0 | 4 | 1 |
| | 26 | 19 | 9 | 51 | 16 | 0 | 0 | 2 | 1 | 35 | 11 | 0 | 0 | 14 | 9 | 0 | 0 | 9 | 4 |
| Septembre—September | 2 | 40 | 14 | 50 | 18 | 0 | 0 | 5 | 2 | 37 | 22 | 0 | 0 | 65 | 13 | 0 | 0 | 4 | 5 |
| | 9 | 37 | 19 | 43 | 10 | 0 | 0 | 0 | 0 | 17 | 2 | 0 | 0 | 13 | 2 | 1 | 0 | 24 | 8 |
| | 16 | 39 | 23 | 51 | 15 | 0 | 0 | 0 | 0 | 49 | 7 | 1 | 0 | 15 | 7 | 1 | 0 | 22 | 9 |
| | 23 | 45 | 26 | 42 | 8 | 0 | 0 | 1 | 0 | 27 | 6 | 0 | 0 | 12 | 11 | 0 | 0 | 15 | 7 |
| | 30 | 38 | 19 | 26 | 13 | 0 | 0 | 1 | 0 | 29 | 8 | 2 | 0 | 12 | 8 | 1 | 0 | 6 | 2 |
| Octobre — October | 7 | 46 | 26 | 40 | 16 | 0 | 0 | 1 | 1 | 39 | 13 | 3 | 0 | 21 | 8 | 1 | 0 | 4 | 2 |
| | 14 | 56 | 32 | 40 | 7 | 0 | 0 | 0 | 0 | 17 | 5 | 0 | 0 | 10 | 2 | 1 | 0 | 17 | 3 |
| | 21 | 55 | 26 | 84 | 24 | 0 | 0 | 0 | 0 | 93 | 27 | 0 | 0 | 6 | 5 | 3 | 0 | 15 | 4 |
| | 28 | 60 | 26 | 29 | 9 | 0 | 0 | 1 | 0 | 39 | 25 | 0 | 0 | 18 | 6 | 1 | 1 | 3 | 2 |
| Novembre — November | 4 | 69 | 19 | 28 | 4 | 0 | 0 | 1 | 1 | 52 | 24 | 1 | 0 | 10 | 5 | 2 | 0 | 3 | 0 |
| | 11 | 59 | 21 | 31 | 8 | 0 | 0 | 0 | 0 | 17 | 5 | 5 | 0 | 16 | 6 | 3 | 0 | 8 | 0 |
| | 18 | 62 | 21 | 45 | 13 | 1 | 1 | 1 | 0 | 67 | 27 | 1 | 0 | 15 | 6 | 4 | 0 | 1 | 1 |
| | 25 | 50 | 22 | 30 | 11 | 1 | 1 | 0 | 0 | 45 | 13 | 4 | 0 | 7 | 4 | 3 | 0 | 2 | 0 |
| Décembre—December | 2 | 41 | 27 | 25 | 6 | 1 | 0 | 1 | 1 | 43 | 27 | 1 | 0 | 9 | 9 | 3 | 1 | 1 | 0 |
| | 9 | 34 | 20 | 17 | 5 | 0 | 0 | 4 | 4 | 41 | 18 | 3 | 0 | 20 | 6 | 7 | 0 | 8 | 1 |
| | 16 | 48 | 24 | 29 | 6 | 0 | 0 | 0 | 0 | 53 | 10 | 1 | 0 | 19 | 9 | 5 | 0 | 15 | 3 |
| | 23 | 32 | 17 | 21 | 9 | 0 | 0 | 3 | 3 | 40 | 19 | 1 | 0 | 16 | 5 | 5 | 0 | 9 | 1 |
| | *31 | 40 | 12 | 23 | 4 | 0 | 0 | 5 | 5 | 81 | 25 | 2 | 0 | 14 | 6 | 5 | 0 | 5 | 1 |

Choléra asiatique: 1 cas a été constaté en 1920. — Asiatic cholera: 1 case reported in 1920.

| | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|
| Fièvre récurrente C. | 3221 | 2898 | 1208 | 172 | 39 | 5 |
| Relapsing fever D. | 591 | 429 | 197 | 35 | 6 | 0 |

* Données pour huit jours. — Data for eight days.
*a*) A ajouter 4 cas et 1 décès sans date connue. — Four cases, one death to be added, date unknown.

## COTE DE L'OR — GOLD COAST (Population: 2 029 754. R. 1921.)

**Nombre de cas de maladies à déclaration obligatoire et de décès causés par ces maladies déclarés en 1923 et 1924; par mois en 1924.**
**Number of Cases of and Deaths from Notifiable Diseases reported in 1923 and 1924; by months in 1924.**

*Sources:* Rapports du Gouvernement de la Côte de l'Or. — Reports from the Government of the Gold Coast.
Rapports du Ministère britannique de Santé. — Reports from British Ministry of Health.

| Maladie — Disease | | | Total 1923 | Total 1924 | Janv. Jan. | Fév. Feb. | Mars March | Avril April | Mai May | Juin June | Juil. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dysenterie | Dysentery | C. | 406 | 293 | 23 | 27 | 26 | 27 | 17 | 33 | 33 | 26 | 23 | 17 | 25 | 16 |
| | | D. | 38 | 28 | 1 | 1 | 4 | 2 | 2 | 8 | 3 | 2 | 1 | 2 | 1 | 1 |
| Fièvre jaune | Yellow fever | C. | 26 | 8 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 3 | 1 | 0 |
| | | D. | 18 | 7 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 3 | 1 | 0 |
| Fièvre récurrente | Relapsing fever | C. | 160 | 16 | 1 | 0 | 2 | 2 | 9 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| | | D. | 3 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Grippe | Influenza | C. | 55 | 86 | 0 | 14 | 6 | 0 | 0 | 6 | 6 | 3 | 9 | 34 | 0 | 8 |
| | | D. | 0 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 0 | 0 |
| Méningite céré-bro-spinale | Cerebro-spinal meningitis | C. | 0 | 4 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| | | D. | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Peste | Plague | C. | 0 | 322 | 0 | 0 | 44 | 57 | 5 | 22 | 96 | 46 | 37 | 4 | 7 | 4 |
| | | D. | 0 | 273 | 0 | 0 | 24 | 49 | 5 | 22 | 82 | 39 | 38 | 4 | 6 | 4 |
| Pneumonie | Pneumonia | C. | 332 | 284 | 19 | 25 | 23 | 15 | 24 | 19 | 46 | 29 | 26 | 21 | 17 | 20 |
| | | D. | 69 | 60 | 3 | 5 | 6 | 3 | 4 | 5 | 12 | 7 | 2 | 6 | 2 | 5 |
| Typhus exanth. | Typhus | C. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Variole | Smallpox | C. | 13 | 153 | 0 | 0 | 1 | 1 | 2 | 43 | 71 | 8 | 3 | 23 | 0 | 1 |
| | | D. | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 |

Pas de cas de choléra asiatique en 1923 et 1924. — No case of Asiatic cholera in 1923 and 1924.

## KENYA ET PROTECTORAT DE L'EST AFRICAIN — KENYA AND EAST AFRICAN PROTECTORATE

(Population: 2 376 000. R. 24 avril 1921.)

**Nombre de cas de méningite cérébro-spinale, de peste et de variole constatés en 1923 et 1924; par mois en 1924.**
**Number of Cases of Cerebro-spinal Meningitis, Plague and Smallpox reported in 1923 and 1924; by months in 1924.**

*Sources:* Rapports du médecin principal, 1923. — Reports from the Principal Medical Officer, 1923. Rapports du Ministère britannique de Santé, 1924. — Reports from British Ministry of Health, 1924.

| Maladie — Disease | | Total 1923 | Total 1924 | Janv. Jan. | Fév. Feb. | Mars March | Avril April | Mai May | Juin June | Juillet July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Méningite cérébro-spinale[1] | Cerebro-spinal meningitis[1] | 50 | 36 | 17 | 1 | 0 | 1 | 0 | 3 | 1 | | 5 | 3 | 4 | 1 |
| Peste | Plague | *1090 | 477 | 49 | 37 | 5 | 17 | 25 | 51 | 88 | | 48 | 29 | 36 | 92 |
| Variole[1] | Smallpox[1] | *108 | 3 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | | 0 | 0 | 0 | 0 |

Avant 1923, les rapports médicaux annuels mentionnent la fréquence de la peste et de la variole, mais ne donnent pas de chiffres exacts à leur sujet. Le nombre de cas de méningite cérébro-spinale a été de 133 pour 1919, de 60 pour 1920, et de 71 pour 1921. — Before 1923, the Annual Medical Reports discuss the prevalence of plague and smallpox, but do not give the exact figures. Cases of cerebro-spinal meningitis were reported as follows: 1919, 133; 1920, 60; 1921, 71.

Pas de cas de choléra asiatique ou de fièvre jaune déclarés en 1923 et 1924. — No case of Asiatic cholera or yellow fever reported in 1923 and 1924.

* Nombre approximatif. — Approximate number.

[1] 27 décès de méningite cérébro-spinale et 1 de variole furent déclarés en 1923. — 27 deaths from cerebro-spinal meningitis and 1 from smallpox were reported in 1923.

## MAURICE — MAURITIUS (Population: 381 678. E. 31 déc. 1923.)

**Nombre de cas de maladies à déclaration obligatoire et de décès causés par ces maladies déclarés dans les années 1920-1924; par mois en 1924.**
**Number of Cases of and Deaths from Notifiable Diseases reported in the years 1920-1924; by months in 1924.**

*Sources:* Rapports du Ministère britannique de Santé, 1923. — Reports from British Ministry of Health, 1923. Annual Report on the Medical and Health Departments 1920-1922.

| Maladie — Disease | | | Total 1920 | Total 1921 | Total 1922 | Total 1923 | Total 1924 | Jan. Jan. | Fév. Feb. | Mars March | Avril April | Mai May | Juin June | Juil. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dysenterie | Dysentery | D. | 499 | 497 | 496 | 318 | 334 | 20 | 25 | 27 | 34 | 43 | 25 | 44 | 35 | 27 | 23 | 14 | 17 |
| Grippe | Influenza | D. | 334 | 1563 | 631 | 556 | 725 | 30 | 17 | 31 | 37 | 1 | 46 | 196 | 141 | 69 | 57 | 39 | 61 |
| Peste | Plague | C. | *a* | 375 | 98 | 138 | 161 | 7 | 14 | 1 | 2 | 3 | 3 | 5 | 3 | 10 | 26 | 44 | 43 |
| | | D. | *a* | 297 | 75 | 118 | 146 | 9 | 11 | 1 | 2 | 2 | 3 | 5 | 3 | 8 | 26 | 40 | 36 |
| Pneumonie | Pneumonia | D. | 924 | 1875 | 1318 | 1083 | 974 | 60 | 63 | 53 | 32 | 0 | 73 | 149 | 129 | 91 | 116 | 100 | 108 |

Autres maladies déclarées: — Other diseases reported:

| | Diphtérie Diphtheria | | Erysipèle Erysipelas | | Fièvre puerpérale Puerperal fever | Fièvre typhoïde Enteric fever | | Méningite cérébro-spin. Cerebro-spin. meningitis | | Rougeole Measles | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | C. | D. | C. | D. | C. | C. | D. | C. | D. | C. | D. |
| 1919 | — | — | — | — | — | 190 | 39 | — | — | — | — |
| 1920 | 24 | 5 | 49 | 11 | — | 168 | 43 | 1 | 0 | 2 | — |
| 1921 | 38 | 3 | 47 | 7 | 18 | 288 | 28 | 5 | 0 | 303 | 46 |
| 1922 | 25 | 1 | 20 | 17 | 21 | 224 | 20 | 1 | 0 | 0 | 0 |
| 1923 | 47 | 5 | 16 | 9 | 18 | 150 | 13 | 3 | 1 | 9 | 0 |

Pas de cas de choléra asiatique, de fièvre jaune, de fièvre récurrente, de typhus exanthématique ou de variole, 1920-1924. — No case of Asiatic cholera, yellow fever, relapsing fever, typhus or smallpox, 1920-1924.

*a* Pas de rapports officiels pour la peste pour la période 1915-1920. — No official records available for plague during period 1915-1920.

## NIGERIA (Population: 18 500 000. E. 1920.)

**Nombre de cas de certaines maladies transmissibles et de décès causés par ces maladies déclarés en 1921-1924; par mois en 1924.**
**Number of Cases of and Deaths from Certain Communicable Diseases reported in 1921-1924; by months in 1924.**

*Sources:* Rapport médical et sanitaire annuel, 1921, 1922 et 1923. Rapports du Ministère britannique de Santé, 1924. — Annual Medical and Sanitary Report, 1921, 1922 and 1923. Reports from the British Ministry of Health, 1924.

| Maladie — Disease | | | Total 1921 | Total 1922 | Total 1923 | Total 1924 | Jan. Jan. | Fév. Feb. | Mars Mar. | Avril April | Mai May | Juin June | Juil. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dysenterie | Dysentery | C. | 1323 | 1577 | 2050 | 231 | 6 | 9 | 13 | 4 | 37 | 30 | 29 | 37 | 20 | 16 | 11 | 19 |
| | | D. | 81 | 76 | 103 | 48 | 0 | 0 | 0 | 0 | 3 | 0 | 16 | 6 | 3 | 6 | 2 | 12 |
| Fièvre jaune | Yellow fever | C. | 0 | 2 | 0 | 0*a* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | D. | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fièvre récurrente | Relapsing fever | C. | 0 | — | 43 | 253 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 15 | 41 | 58 | 32 | 95 |
| | | D. | 0 | — | 15 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 5 | 13 |
| Fièvre paratyphoïde | Paratyphoid fever | C. | — | — | — | 4 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | D. | — | — | — | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Grippe | Influenza | C. | 138 | 782 | 1021 | 305 | 34 | 25 | 37 | 1 | 0 | 0 | 165 | 43 | 0 | 0 | 0 | 0 |
| | | D. | 3 | 3 | 12 | 5 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | C. | 168 | — | 170 | 529 | 124 | 282 | 80 | 21 | 0 | 1 | 0 | 0 | 0 | 5 | 2 | 14 |
| | | D. | 2 | — | 154 | 398*b* | 64 | 193 | 95 | 34 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 10 |
| Peste | Plague | C. | 0 | 0 | 5 | 412 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 7 | 133 | 176 | 78 | 17 |
| | | D. | 0 | 0 | 2 | 338 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 7 | 118 | 138 | 61 | 13 |
| Pneumonie | Pneumonia | C. | 1134 | 908 | 1383 | 284 | 23 | 7 | 10 | 4 | 12 | 8 | 40 | 48 | 1 | 56 | 46 | 29 |
| | | D. | 173 | 116 | 167 | 324 | 2 | 2 | 0 | 0 | 0 | 0 | 37 | 48 | 108 | 56 | 44 | 27 |
| Variole | Smallpox | C. | 1031 | — | 1222 | 484 | 91 | 129 | 28 | 19 | 14 | 76 | 1 | 4 | 1 | 4 | 77 | 40 |
| | | D. | 182 | — | 189 | 128 | 16 | 20 | 49 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 23 | 16 |

*a*) 1 cas suivi de décès signalé à Ibadan; date inconnue. — One fatal case reported from Ibadan; date unknown.
*b*) A ajouter 987 décès en mars dans la ville et le district de Katsina, et 439 décès de mai à octobre. — To be added 987 deaths in Katsina town and district in March, and 439 deaths from May to October.

## NYASSALAND — NYASALAND (Population : 1 201 983. R. 2 avril 1921.)

**Nombre de cas de maladies à déclaration obligatoire déclarés en 1920-1924; par mois en 1924.**
**Number of Cases of Notifiable Diseases reported in 1920-1924; by months in 1924.**

*Sources :* Rapport médical annuel, 1920-1922; Rapports mensuels du Département sanitaire, 1923
Annual Medical Report, 1920-1922; Monthly Reports from the Sanitation Department, 1923.
Rapports du Ministère britannique de Santé, 1924; Reports from British Ministry of Health, 1924.

| Maladie — Disease | | Total 1920 | Total 1921 | Total 1922 | Total 1923 | Total 1924 | Jan. Jan. | Fév. Feb. | Mars Mar. | Avril April | Mai May | Juin June | Juil. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Coqueluche | Whooping-cough | 8 | 3 | — | 13 | 79 | 1 | 2 | 3 | 0 | 0 | 0 | 4 | 17 | 17 | 20 | 14 | 1 |
| Dysenterie | Dysentery | 476 | 329 | 329 | 1122 | — | | | | | | | | | | | | |
| Fièvre récurrente | Relapsing fever | — | 24 | 47 | 74 | 48 | 3 | 8 | 1 | 3 | 5 | 6 | 1 | 1 | 4 | 15 | 1 | 0 |
| Fièvre typhoïde | Enteric fever | 3 | 2 | 2 | 4 | 7 | 0 | 0 | 5 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Grippe | Influenza | — | — | — | 3388 | 375 | 47 | 80 | 129 | 31 | 7 | 4 | 22 | 14 | 19 | 16 | 6 | 0 |
| Paludisme | Malaria | 691 | 1122 | 1611 | 2653 | — | | | | | | | | | | | | |
| Peste | Plague | — | 2 | 0 | 7 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pneumonie | Pneumonia | 44 | 166 | — | 85 | — | | | | | | | | | | | | |
| Pian | Yaws | 39 | 238 | 387 | 637 | — | | | | | | | | | | | | |
| Rougeole | Measles | 14 | 11 | — | 62 | 1421 | 72 | 176 | 47 | 84 | 1 | 28 | 56 | 22 | 45 | 176 | 653 | 61 |
| Tuberculose, toutes formes | Tuberculosis, all forms | 17 | 28 | 40 | 28 | 17 | 4 | 2 | 2 | 2 | 0 | 0 | 3 | 1 | 0 | 1 | 2 | 0 |
| Varicelle | Chickenpox | 66 | 16 | 57 | 24 | 34 | 5 | 4 | 2 | 2 | 0 | 1 | 10 | 0 | 2 | 4 | 3 | 1 |

Autres maladies déclarées: — Other diseases reported:

| | Béri-béri Beri-beri | Diphtérie Diphtheria | Fièvre hématur. Blackwater fever | Lèpre Leprosy | Méningite cérébro-spin. Cerebro-spin. meningitis | Rhumatisme articul. Rheumatic fever | Tétanos Tetanus | Variole Smallpox |
|---|---|---|---|---|---|---|---|---|
| 1920 | 53 | 5 | 11 | 4 | — | — | — | — |
| 1921 | 8 | 1 | 14 | 20 | — | — | — | — |
| 1922 | 4 | 0 | 14 | 19 | — | — | — | — |
| 1923 | 10 | 3 | 14 | 22 | 1 | — | 3 | 14 |
| 1924 | — | — | — | — | 80 | 1 | 1 | — |

Les statistiques vitales concernant la population indigène n'existant pas, la fréquence des maladies suivantes n'est pas exactement connue: paludisme, maladie du sommeil, peste, ankylostomiase, fièvre spirillum, pian, variole, rougeole, lèpre, maladies vénériennes et schistomiase. La peste existe à l'état endémique dans le Nyassa septentrional et des cas sporadiques sont signalés périodiquement. Les rapports de cas de variole sont rares.

In the absence of any vital statistics regarding the native population, there is no exact knowledge as to the prevalence of the following diseases: Malaria, trypanosomiasis, plague, ankylostomiasis, spirillum fever, yaws, smallpox, measles, leprosy, venereal diseases and schistomiasis. Plague is endemic in the North Nyasa district and sporadic outbreaks occur periodically. Reports of outbreaks of smallpox are rare.

## OUGANDA — UGANDA (Population : 3 071 608. R. avril 1921.)

**Nombre de cas et de décès de méningite cérébro-spinale, de peste et de variole déclarés en 1920-1924; par mois en 1924.**
**Number of Cases of and Deaths from Cerebro-spinal Meningitis, Plague and Smallpox reported in 1920-1924; by months in 1924.**

*Sources :* Rapports périodiques du Ministère britannique de Santé, 1923-1924. Current Reports from British Ministry of Health, 1923-1924.
Annual Medical and Sanitary Report, 1920-1922.

| Maladie — Disease | | | Total 1920 | Total 1921 | Total 1922 | Total 1923 | Total 1924 | Janv. Jan. | Fév. Feb. | Mars March | April Avril | Mai May | Juin June | Juillet July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Méningite cérébro-spin. | Cerebro-spinal meningitis | C. | — | *a* | 677 | 207 | 118 | 5 | 5 | 2 | 5 | 8 | 10 | 8 | 2 | 10 | 8 | 51 | 4 |
| | | D. | — | *a* | 471 | 87 | 103 | 4 | 5 | 2 | 5 | 8 | 8 | 8 | 2 | 9 | 8 | 40 | 4 |
| Peste | Plague | C. | — | — | 1362 | 938 | 616 | 36 | 31 | 14 | 14 | 28 | 97 | 117 | 79 | 56 | 45 | 62 | 37 |
| | | D. | 1732 | 5871 | 1305 | 914 | 535 | 35 | 29 | 13 | 12 | 23 | 84 | 96 | 62 | 52 | 39 | 58 | 32 |
| Variole | Smallpox | C. | — | 506 | 104 | 97 | 7 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 4 | 0 | 0 |
| | | D. | — | 89 | 12 | 10 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |

Pas de cas de choléra asiatique, de fièvre jaune ou de typhus exanthématique, 1920-1924. — No case of Asiatic cholera, yellow fever or typhus, 1920-1924.
*a* Pas d'épidémie importante de méningite cérébro-spinale à signaler, mais des cas sporadiques ont été notifiés de Kampala, Toro et Soroti.
*a* No serious epidemic of cerebro-spinal meningitis occurred, but sporadic cases were reported from Kampala, Toro and Soroti.

## RHODÉSIE DU NORD — NORTHERN RHODESIA

(Population: 983 539. R. 3 mai 1921.)

**Nombre de cas de maladies transmissibles et de décès dus à ces maladies déclarés en 1923-1924; par périodes de quatre semaines en 1924.**
**Number of Cases of and Deaths from Communicable Diseases reported in 1923-1924; by four-week periods in 1924.**

*Source :* Rapports du Ministère britannique de Santé. — Reports from the British Ministry of Health.

| Maladie — Disease | | | Total 1923 | Total 1924 | Période de quatre semaines finissant le: Four-week period ending: Janv. Jan. | Fév. Feb. | Mars March | Avril April | Mai May | Juin June | Juillet July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dysenterie | Dysentery | C. | 33 | 58 | 13 | 9 | 2 | 3 | 6 | 3 | 1 | 1 | 4 | 3 | 5 | 1 | 7 |
| | | D. | 6 | 6 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 |
| Fièvre récurrente | Relaps. fever | C. | 42 | 36 | 6 | 2 | 2 | 1 | 3 | 2 | 4 | 0 | 1 | 5 | 1 | 3 | 6 |
| | | D. | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Grippe | Influenza | C. | 1963 | 2364 | 144 | 253 | 217 | 218 | 160 | 150 | 124 | 168 | 142 | 220 | 254 | 181 | 133 |
| | | D. | 86 | 223 | 7 | 18 | 11 | 13 | 8 | 4 | 9 | 3 | 6 | 6 | 128 | 4 | 6 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | C. | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | D. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Variole | Smallpox | C. | 59 | 258 | 5 | 13 | 1 | 2 | 13 | 48 | 18 | 33 | 15 | 20 | 39 | 30 | 21 |
| | | D. | 9 | 17 | 0 | 2 | 0 | 1 | 1 | 1 | 0 | 4 | 0 | 2 | 4 | 1 | 1 |

Pas de cas de choléra asiatique, de peste ou de fièvre jaune, 1923-1924. — No case of Asiatic cholera, plague or yellow fever, 1923-1924.

## RHODÉSIE DU SUD — SOUTHERN RHODESIA

(Population: 899 187. R. 3 mai 1921.)

**Nombre de cas de certaines maladies infectieuses et de décès causés par ces maladies déclarés en 1919-1924; par périodes de quatre semaines en 1924.**

**Number of Cases of and Deaths from Certain Infectious Diseases reported in 1919-1924; by four-week periods in 1924.**

*Sources:* Rapport annuel sur la Santé publique, 1921; Rapports hebdomadaires du Département de la Santé publique. Annual Report on the Public Health, 1921; Weekly Reports from Public Health Department.

| Période de quatre semaines finissant le: Four-week period ending: | Coqueluche Whooping-cough | Diphtérie Diphtheria | Fièvre typhoïde Enteric fever | | Grippe Influenza | | Méningite cérébro-spinale Cerebro-spinal meningitis | | Oreillons Mumps | Rougeole Measles | Rubéole Germ. measles | Scarlatine Scarlet fever | Varicelle Chickenpox | Variole Smallpox | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | * C. | C. | C. | D. | * C. | D. | C. | D. | * C. | C. | C. | C. | * C. | * C. | D. |
| Total 1921 | 6 | 8 | 5 | — | 1086 | 69 | — | — | 3 | 40 | — | 5 | 23 | 515 | 145 |
| Total 1922 | 0 | 0 | 10 | 0 | 1259 | 19 | 3 | 1 | 0 | 3 | — | 4 | 96 | 501 | 21 |
| Total 1923 | 48 | 3 | 61 | 14 | 47 | 21 | 6 | 2 | 98 | 13 | — | 4 | 84 | 16 | 8 |
| Total 1924 | 96 | 2 | 31 | 2 | 242 | 29 | 3 | 2 | 35 | 29 | 43 | 6 | 504 | 2 | 0 |
| Janvier — January 23 | 0 | 0 | 6 | 1 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 7 | 0 | 0 |
| Février — February 20 | 3 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 11 | 0 | 0 |
| Mars — March 19 | 13 | 0 | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 5 | 0 | 0 |
| Avril — April 16 | 9 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 |
| Mai — May 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 0 |
| Juin — June 11 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 55 | 0 | 0 |
| Juillet — July 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 1 | 34 | 0 | 0 |
| Août — August 6 | 43 | 0 | 1 | 0 | 50 | 0 | 1 | 0 | 0 | 8 | 0 | 1 | 101 | 0 | 0 |
| Septembre — September 3 | 7 | 0 | 0 | 0 | 28 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 86 | 0 | 0 |
| Octobre — October 1 | 0 | 0 | 3 | 0 | 12 | 0 | 0 | 0 | 11 | 2 | 8 | 0 | 69 | 0 | 0 |
| Octobre — October 29 | 2 | 1 | 2 | 0 | 28 | 0 | 0 | 0 | 1 | 2 | 1 | 0 | 56 | 0 | 0 |
| Novembre — November 26 | 1 | 0 | 3 | 1 | 82 | 9 | 0 | 0 | 1 | 1 | 23 | 1 | 47 | 0 | 0 |
| Décembre ** — December ** 31 | 16 | 0 | 3 | 0 | 40 | 20 | 1 | 0 | 18 | 12 | 8 | 0 | 29 | 0 | 0 |

Autres maladies déclarées: — Other diseases reported:

| | Encéphalite léthar. Encephalitis lethar. | Erysipèle Erysipelas | Fièvre purpuérale Puerperal fever | Herpès tonsurans Ringworm | Maladie du sommeil Trypanosomiasis |
|---|---|---|---|---|---|
| | C. | C. | C. | C. | C. |
| 1923 | — | — | — | — | 1 |
| 1924 | 3 | 3 | 3 | 1 | 0 |

7 décès causés par la coqueluche et 3 causés par la diphtérie en 1923. — 7 deaths from whooping-cough and 3 from diphtheria in 1923.

* Les données sont incomplètes. — The data are incomplete.

** Période de cinq semaines. — Five-week period.

## SONDAN ÉGYPTIEN — EGYPTIAN SUDAN

**Nombres de cas de certaines maladies infectueuses et de décès causés par ces maladies enregistrés par le personnel médical des hôpitaux et dispensaires civiles, en 1924.**

**Number of Cases of and Deaths from Certain Infectious Diseases reported by the Medical Staff of civile hospitals and dispensaries in 1924.**

*Source:* Annuel Report of the Sudan Medical Service, 1924.

| Maladie — Diseases | | Ces traités Cases treat. | Décès Deaths | Maladie — Diseases | | Ces traités Cases treat. | Décès Deaths |
|---|---|---|---|---|---|---|---|
| Ankylostomiase | Ankylostomiasis | 73 | 0 | Paludisme | Malaria | 3526 | 28 |
| Béri-béri | Beri-beri | 3 | 0 | Pérical | Madura-disease | 183 | 2 |
| Bilharziose | Bilharziasis | 158 | 0 | Piau | Yaus | 1 | 0 |
| Coqueluche | Whooping cough | 14 | 0 | Pneumonie | Pneumonia | 100 | 16 |
| Dengue | Dengue | 150 | 0 | Rougeole | Measles | 48 | 3 |
| Diphtérie | Diphtheria | 20 | 5 | Tétanos | Tetanus | 9 | 6 |
| Dysenterie: | Dysentery: | 716 | 22 | Trachome | Trachoma | 192 | 0 |
| Amibienne | Amboeic | 605 | 15 | Trypanosomiase | Trypanosomiasis | 1 | 0 |
| Bacillaire | Bacillary | 111 | 7 | Tuberculose: | Tuberculosis: | 290 | 36 |
| Erysipèle | Erysipelas | 5 | 0 | Pulmonaire | Pulmonary | 159 | 24 |
| Fièvre de trois jours | Phlebotomus | 1 | 0 | Autres formes | Other forms | 131 | 12 |
| Fièvre hématurique | Blackwater fever | 10 | 1 | Varicelle | Chickenpox | 120 | 1 |
| Fièvre méditerranéenne | Malta fever | 11 | 0 | Variole | Smallpox | 6 | 1 |
| Fièvre récurrente | Relapsing fever | 1 | 0 | Ver de Guinée | Guinea worm | 10 | 0 |
| Fièvre typhoïde | Enteric fever | 38 | 13 | Maladies vénériennes: | Venereal diseases | | |
| Filariose | Filariasis | 5 | 0 | Chancre mou | Soft chancre | 52 | 0 |
| Grippe | Influenza | 712 | 5 | Gonorrhée | Gonorrhœa | 793 | 1 |
| Leichmaniose | Leishmaniasis | 33 | 9 | Syphilis | Syphilis | 1173 | 3 |
| Lèpre | Leprosy | 15 | 4 | | | | |
| Méningite cérébro-spinales | Cerebro-spinal meningitis | 5 | 5 | | | | |
| Oreillons | Mumps | 296 | 0 | | | | |

## SIERRA-LÉONE — SIERRA LEONE

(Population: 1 541 311. R. 24 avril 1921.)

**Nombre de cas de certaines maladies déclarés en 1923-1924; par mois en 1924.**

**Number of Cases of Certain Diseases notified in 1923-1924; by months in 1924.**

*Source:* Rapports du Ministère britannique de Santé. — Reports from the British Ministry of Health.

| Maladie — Disease | | Total 1923 | Total 1924 | Janv. Jan. | Fév. Feb. | Mars March | Avril April | Mai May | Juin June | Juill. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dysenterie | Dysentery | 115 | 108 | 7 | 7 | 13 | 15 | 10 | 9 | 10 | 10 | 6 | 10 | 7 | 4 |
| Pneumonie | Pneumonia | 92 | 73 | 10 | 5 | 4 | 3 | 2 | 6 | 11 | 3 | 5 | 8 | 12 | 4 |
| Varicelle | Chickenpox | 97 | 46 | 7 | 6 | 10 | 3 | 2 | 1 | 4 | 3 | 4 | 1 | 3 | 2 |
| Variole | Smallpox | 18 | 10 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |

1 cas de scarlatine déclaré en 1923. — 1 case of scarlet fever reported in 1923.
D'après les rapports annuels pour 1921 et 1922, 47 cas de variole furent déclarés en 1921 et 44 cas en 1922, mais ces données sont incomplètes. — From annual reports for 1921 and 1922, 47 cases of smallpox were reported in 1921 and 44 cases in 1922, but these data are incomplete.

## TERRITOIRE DU TANGANYIKA — TANGANYIKA TERRITORY

(Population: 4 109 893. R. 24 avril 1921.)

**Nombre de cas de quelques maladies à déclaration obligatoire et de décès causés par ces maladies en 1921-1924; par périodes de quatre semaines en 1924.**

**Number of Cases of and Deaths from certain Notifiable Diseases reported in 1921-1924; by four-week periods in 1924.**

*Sources:* Rapports annuels du Ministère des Colonies, 1921-1923; Rapports du Ministère britannique de Santé.
Annual Reports from the Colonial Office, 1921-1923; Reports from the British Ministry of Health.

| Maladie — Disease | | Total 1921 | Total 1922 | Total 1923 | Total 1924 | Période de quatre semaines finissant le : Four-week period ending : 26 jan. Jan. 26 | 23 fév. Feb. 23 | 22 mars Mar. 22 | 19 avril April 19 | 17 mai May 17 | 14 juin June 14 | 12 juil. July 12 | 9 août Aug. 9 | 6 sept. Sept. 6 | 4 oct. Oct. 4 | 1 nov. Nov. 1 | 29 nov. Nov. 29 | 27 déc. Dec. 27 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Grippe Influenza | C. | — | 1176 | 1933 | 544 | 0 | 0 | 234 | 175 | 0 | présent | 47 | présent | présent | 8 | 38 | présent | 42 |
| | D. | 113 | 37 | 291 | 38 | 0 | 0 | 9 | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Méning. Cerebro-cérébro- spinale spinale mening. | C. | 17 | 9 | 101 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | D. | 4 | 6 | 89 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Peste Plague | C. | — | 52 | 39 | 42 | 0 | 8 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 16 | 15 |
| | D. | 163 | 40 | 26 | 35 | 0 | 6 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 16 | 10 |
| Variole Smallpox | C. | 1267 | 390 | 217 | 30 | 2 | 0 | 25 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| | D. | 151 | 46 | 33 | 12 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## PROTECTORAT DE LA TUNISIE — PROTECTORATE OF TUNIS

(Population: 2 074 301. R. 6 mars 1921.)

**Nombre de cas de maladies transmissibles déclarés en 1923 et 1924; par mois en 1924.**

**Number of Cases of Communicable Diseases reported in 1923 and 1924; by months in 1924.**

*Source:* Information sanitaire.

| Maladie — Disease | | Total 1923 | Total 1924 | Jan. Jan. | Fév. Feb. | Mars March | Avril April | Mai May | Juin June | Juill. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conjonctivite purulente | Purulent conjunctivitis | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Coqueluche | Whooping-cough | 5 | 16 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 2 | 0 |
| Diphtérie | Diphtheria | 203 | 282 | 18 | 15 | 15 | 17 | 18 | 13 | 23 | 39 | 38 | 31 | 21 | 34 |
| Dysenterie | Dysentery | 78 | 108 | 0 | 1 | 2 | 4 | 9 | 10 | 6 | 7 | 19 | 13 | 22 | 15 |
| Encéphalite léthargique | Encephalitis lethargica | 2 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fièvre méditerranéenne | Mediterranean fever | 69 | 81 | 1 | 1 | 4 | 13 | 16 | 17 | 6 | 10 | 8 | 4 | 1 | 0 |
| Fièvre récurrente | Relapsing fever | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fièvre typhoïde | Enteric fever | 655 | 821 | 57 | 46 | 49 | 54 | 62 | 85 | 75 | 59 | 100 | 90 | 62 | 82 |
| Grippe | Influenza | 30 *a* | 308 | 45 | 138 | 21 | 93 | 8 | 0 | 0 | 0 | 0 | 0 | 3 | 0 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | 21 | 11 | 3 | 2 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 3 |
| Oreillons | Mumps | 33 | 148 | 8 | 14 | 10 | 48 | 22 | 30 | 8 | 2 | 2 | 2 | 0 | 2 |
| Paludisme | Malaria | 62 | 44 | 8 | 3 | 0 | 0 | 1 | 1 | 3 | 3 | 23 | 0 | 2 | 0 |
| Peste | Plague | 31 | 11 | 2 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Poliomyélite aiguë | Acute Poliomyelitis | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Rougeole | Measles | 442 | 221 | 34 | 55 | 39 | 8 | 11 | 9 | 56 | 1 | 4 | 0 | 4 | 0 |
| Scarlatine | Scarlet fever | 37 | 66 | 4 | 1 | 4 | 2 | 2 | 5 | 5 | 4 | 4 | 5 | 20 | 10 |
| Teigne | Favus | 6 | 3 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Trachome | Trachoma | 14 | 102 | 0 | 6 | 40 | 52 | 1 | 1 | 0 | 0 | 0 | 2 | 0 | 0 |
| Tuberculose | Tuberculosis | 359 | 469 | 37 | 30 | 46 | 45 | 51 | 55 | 56 | 40 | 46 | 34 | 16 | 13 |
| Typhus exanthém. | Typhus | 357 | 209 | 13 | 5 | 34 | 79 | 24 | 14 | 9 | 7 | 5 | 7 | 11 | 1 |
| Variole | Smallpox | 279 | 606 | 25 | 14 | 29 | 17 | 19 | 21 | 19 | 45 | 34 | 80 | 163 | 140 |

*a* Ce chiffre ne comprend pas une épidémie signalée (le nombre de cas ne fut pas donné). — Does not include an epidemic reported (number of cases not given).

## UNION DE L'AFRIQUE DU SUD — UNION OF SOUTH AFRICA

(Population: 7 293 927. E. 31 déc. 1924 *.)

**Nombre de cas et de décès dus à la peste, au typhus exanthématique et à la variole déclarés en 1920-1924; par mois en 1924.**

**Number of Cases of and Deaths from Plague, Typhus and Smallpox reported in 1920-1924; by months in 1924.**

*Sources:* Rapports annuels du Département de la Santé publique des années 1920, 1921, 1922 et 1923. Rapports mensuels pour les années 1922, 1923 et 1924.— Annual Reports of the Health Department for 1920, 1921, 1922 and 1923. Monthly Reports for 1922, 1923 and 1924.

| Maladie — Disease | | | Total 1920 | Total 1921 | Total 1922 | Total 1923 | Total 1924 | Janv. Jan. | Févr. Feb. | Mars Mar. | Avril April | Mai May | Juin June | Juil. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Peste | Plague | C. | 12 | 33 | 10 | 20 | 400 | 35 | 111 | 109 | 70 | 21 | 3 | 4 | 1 | 0 | 0 | 24 | 22 |
| | | D. | 4 | 16 | 8 | 12 | 246 | 16 | 64 | 61 | 59 | 8 | 2 | 2 | 1 | 0 | 0 | 18 | 15 |
| Typhus exanth. | Typhus | C. | 11276 | 9157 | 7922 | 2922 | 1570 | 199 | 215 | 121 | 136 | 87 | 74 | 101 | 111 | 110 | 69 | 233 | 114 |
| | | D. | 1791 | 1140 | 966 | 437 | 257 | 25 | 50 | 13 | 13 | 9 | 10 | 19 | 12 | 5 | 14 | 66 | 21 |
| Variole | Smallpox | C. | 1036 | 1108 | 713 | 285 | 346 | 2 | 71 | 56 | 24 | 53 | 34 | 15 | 37 | 8 | 32 | 7 | 7 |
| | | D. | *a* | 19 | 23 | 8 | 2 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Déclaration de maladies contagieuses (Blancs et indigènes) par les médecins.
Notifications of Infectious Diseases (Whites and Natives) by Medical Practitioners.

| Maladie — Disease | | Total 1919 | Total 1920 | Total 1921 | Total 1 janv. 30 juin Jan. 1st June 30 1922 | Total 1 juil. 1922 30 juin 1923 July 1 1922 June 30 1923 | Total 1 juil. 1923 30 juin 1924 July 1 1923 June 30 1924 | 1920 B. W. | 1920 I. N. | 1921 B. W. | 1921 I. N. | 1922 1 janv.–30 juin Jan. 1 – June 30 B. W. | 1922 I. N. | 1er juillet 1922 30 juin 1923 July 1st 1922 June 30th 1923 B. W. | 1er juillet 1922 30 juin 1923 July 1st 1922 June 30th 1923 I. N. | 1er juillet 1923 30 juin 1924 July 1st 1923 June 30th 1924 B. W. | 1er juillet 1923 30 juin 1924 July 1st 1923 June 30th 1924 I. N. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *b* | *b* | | | | | | | | |
| Anthrax | Anthrax | 53 | 75 | 110 | 46 | 50 | 35 | 31 | 44 | 17 | 93 | 13 | 33 | 11 | 39 | 13 | 22 |
| Diphtérie | Diphtheria | 1036 | 1110 | 1014 | 540 | 885 | 1037 | 877 | 139 | 847 | 167 | 459 | 81 | 771 | 114 | 861 | 176 |
| Encéphalite infectieuse | Infective Encephalitis | *a* | 25 | 33 | 6 | 13 | 13 | 7 | 18 | 12 | 21 | 4 | 2 | 4 | 9 | 6 | 7 |
| Erysipèle | Erysipelas | 129 | 197 | 167 | 79 | 194 | 188 | 146 | 44 | 118 | 49 | 59 | 20 | 142 | 52 | 122 | 66 |
| Fièvre de Malte | Malta fever | 13 | 37 | 27 | 25 | 27 | 18 | 27 | 10 | 20 | 7 | 24 | 1 | 16 | 11 | 11 | 7 |
| Fièvre puerpérale y compris septicémie puerp. | Puerperal fever including puerperal sepsis | 96 | 195 | 134 | 64 | 136 | 128 | 117 | 75 | 92 | 42 | 33 | 31 | 87 | 49 | 63 | 65 |
| Fièvre typh. | Enteric fever | 3114 | 5515 | 4511 | 2623 | 4163 | 3859 | 3036 | 2256 | 2713 | 1798 | 1514 | 1109 | 2424 | 1739 | 2037 | 1822 |
| Lèpre | Leprosy | 71 | 115 | 108 | 45 | 87 | 53 | 5 | 110 | 16 | 92 | 2 | 43 | 2 | 85 | 7 | 46 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | 21 | 128 | 113 | 58 | 515 | 826 | 16 | 112 | 23 | 90 | 7 | 51 | 107 | 408 | 151 | 675 |
| Morve | Glanders | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Ophtalmie gonorrhéique des nouv.-nés | Gonorrhœal ophthalmia neonatorum | *a* | 10 | 22 | 3 | 12 | 14 | 5 | 5 | 18 | 4 | 1 | 2 | 7 | 5 | 6 | 8 |
| | | *a* | 52 | 98 | 41 | 82 | 87 | 24 | 28 | 57 | 41 | 12 | 29 | 51 | 31 | 47 | 40 |
| Peste | Plague | — | 6 | 33 | 6 | 2 | 372 | 0 | 6 | 7 | 26 | 0 | 6 | 0 | 2 | 51 | 321 |
| Poliomyélite | Poliomyelitis | 10 | 35 | 33 | 18 | 5 | 3 | 26 | 7 | 27 | 6 | 14 | 4 | 2 | 3 | 0 | 3 |
| Rage humaine | Rabies | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Scarlatine | Scarlet fever | 2783 | 1756 | 920 | 640 | 2042 | 1024 | 1653 | 79 | 854 | 66 | 628 | 12 | 2000 | 42 | 984 | 40 |
| Tuberculose | Tuberculosis | 2305 | 3504 | 2962 | 1297 | 3612 | 3942 | 349 | 2964 | 439 | 2523 | 174 | 1123 | 400 | 3212 | 427 | 3515 |
| Typhus exanth. | Typhus | 4803 | 6992 | 6257 | 1851 | 3762 | 2122 | 70 | 6922 | 97 | 6160 | 33 | 1818 | 56 | 3706 | 46 | 2076 |
| Variole | Smallpox | 559 | 1036 | 787 | 269 | 285 | 403 | 169 | 866 | 71 | 716 | 83 | 186 | 19 | 266 | 28 | 375 |

Pas de cas de choléra asiatique ou de fièvre jaune, 1919-1924. — No case of Asiatic cholera or yellow fever, 1919-1924.
* Blancs — Whites = 1 610 774; Indigènes — Natives = 5 683 153.
B. = Blancs; I. = Indigènes. — W. = Whites; N. = Natives.
*a* Les données n'étaient pas inclues dans les rapports reçus. — Data not given in the reports available.
*b* Les données dans ces colonnes ne correspondent pas toujours aux totaux pour 1920 qui ont été pris dans un rapport plus récent. — Data given in these columns do not always agree with totals for 1920, which have been taken from a more recent report.

## ZANZIBAR

(Population: 197 000. R. 30 avril 1921.)

**Nombre de cas et de décès causés par la variole dans les années 1919-1924; décès causés par certaines autres maladies en 1919-1922.**

**Number of Cases of and Deaths from Smallpox reported from 1919 to 1924; Deaths from certain other Diseases, in 1919-1922.**

*Sources:* Rapports périodiques du Ministère britannique de Santé, 1924. Rapports annuels du Département de Santé, 1919-1923. Current Reports from the British Ministry of Health, 1924. Annual Reports of Health Department, 1919-1923.

| Maladie — Disease | | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|---|
| Dysenterie | Dysentery | D. | 14 | 9 | 1 | 2 | — | — |
| Grippe | Influenza | D. | 13 | 1 | 0 | 5 | — | — |
| Fièvre hématurique | Blackwater fever | D. | — | 3 | 3 | 3 | — | — |
| Lèpre | Leprosy | C. | 3 | 17 | 13 | 13 | — | — |
| | | D. | 12 | 7 | 12 | 8 | — | — |
| Ménin. cérébro-spinale | Cerebro-spinal mening. | D. | — | 1 | 0 | 3 | — | — |
| Pneumonie | Pneumonia | D. | — | 25 | 24 | 46 | — | — |
| Tétanos | Tetanus | D. | 1 | 2 | 2 | 1 | — | — |
| Variole | Smallpox | C. | 4 | 7 | 158 | 167 | 225 | 5 |
| | | D. | 1 | 1 | 56 | 54 | 2 | 0 |

Pas de cas de choléra, de fièvre jaune ou de peste, 1919-1924. — No case of cholera, yellow fever or plague, 1919-1924.

# AMÉRIQUE — AMERICA

## BRÉSIL — BRAZIL

RIO DE JANEIRO (District Fédéral). (Population: 1 381 360. E. 30 juin 1924.)

**Nombre de décès constatés dans le District Fédéral, 1920 - 30 juin 1924.**
**Number of Deaths reported in the Federal District, 1920 - June 30th, 1924.**

*Source:* Rapports du Département de la Santé publique. — Reports from the Department of Public Health.

| Cause de décès — Cause of death | | Total 1920 | Total 1921 | Total 1922 | Total 1923 | Total 1924 1 janv.-30 juin Jan. 1-June 30 | Janv. Jan. | Fév. Feb. | Mars Mar. | Avril April | Mai May | Juin June |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Peste | Plague | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Anthrax | Anthrax | — | — | — | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Béri-béri | Beri-beri | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Coqueluche | Whooping-cough | 189 | 45 | 261 | 546 | 144 | 33 | 30 | 29 | 17 | 21 | 14 |
| Diphtérie | Diphtheria | 62 | 60 | 94 | 49 | 21 | 4 | 2 | 4 | 5 | 3 | 3 |
| Dysenterie | Dysentery | 209 | 247 | 383 | 275 | 141 | 27 | 21 | 17 | 25 | 28 | 23 |
| Encéphalite létharg. | Encephalitis leth. | 17 | 7 | 7 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Erysipèle | Erysipelas | — | — | — | 61 | 25 | 4 | 6 | 3 | 4 | 6 | 2 |
| Fièvre paratyphoïde | Paratyphoid fever | 128 | 132 | 152 | 131 | 42 | 13 | 7 | 6 | 5 | 7 | 4 |
| Fièvre typhoïde | Typhoid fever | | | | | 23 | 5 | 7 | 2 | 1 | 5 | 3 |
| Granulome ulcéreux des organes génitaux | Venereal granuloma | — | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Grippe | Influenza | 421 | 777 | 911 | 1079 | 489 | 53 | 68 | 90 | 98 | 109 | 71 |
| Infect. cryptogén. | Cryptogenic infect. | | 1 | 5 | | | | | | | | |
| Infect. puerpérale | Puerperal infection | — | — | — | — | 62 | 9 | 12 | 10 | 17 | 9 | 5 |
| Leichmaniose | Leishmaniasis | — | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lèpre | Leprosy | 28 | 44 | 40 | 42 | 22 | 5 | 4 | 6 | 3 | 1 | 3 |
| Maladie de Chagas | Chagas disease | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | 110 | 95 | 119 | 46 | 17 | 3 | 5 | 2 | 1 | 4 | 2 |
| Mycose | Mycosis | 5 | 4 | 5 | 3 | 1 | 0 | 0 | 0 | 0 | 1 | 0 |
| Oreillons | Mumps | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Paludisme | Malaria | 539 | 360 | 358 | 417 | 224 | 23 | 26 | 48 | 55 | 38 | 34 |
| Pneumonie* | Pneumonia* | — | — | — | — | 857 | 134 | 139 | 119 | 143 | 151 | 171 |
| Poliomyélite aiguë | Acute poliomyelitis | 2 | 2 | 5 | 4 | 2 | 1 | 0 | 0 | 1 | 0 | 0 |
| Rage | Rabies | 6 | 3 | 6 | 4 | 5 | 1 | 1 | 1 | 1 | 1 | 0 |
| Rougeole | Measles | 65 | 95 | 653 | 173 | 24 | 10 | 4 | 4 | 3 | 2 | 1 |
| Scarlatine | Scarlet fever | 4 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Syphilis | Syphilis | — | — | — | — | 320 | 58 | 54 | 53 | 51 | 57 | 47 |
| Tétanos | Tetanus | — | — | — | — | 60 | 8 | 10 | 12 | 9 | 8 | 13 |
| Trachome | Trachoma | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tuberculose | Tuberculosis | 4608 | 4641 | 4483 | 4183 | 2143 | 382 | 331 | 369 | 365 | 349 | 347 |
| Varicelle | Varicella | — | 0 | 8 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Variole | Smallpox | 99 | 49 | 117 | 38 | 4 | 1 | 0 | 0 | 2 | 1 | 0 |
| Gonorrhée | Gonorrhœa | — | — | 7 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

* Pneumonie et broncho-pneumonie. — Pneumonia and broncho-pneumonia.

## CHILI — CHILE

(Population: 3 819 096. E. sept. 1922.)

**Nombre de cas de typhus exanthématique et de variole, et de décès dus à ces maladies, 1919 - 30 juin 1924.**
**Number of Cases of and Deaths from Typhus and Smallpox, 1919 - June 30th, 1924.**

*Source:* Rapport de la Direction générale de la Santé publique — Report from the General Director of Public Health.

| Maladie — Disease | | | Total 1919 | Total 1920 | Total 1921 | Total 1922 | Total 1923 | 1924 1er janv.-30 juin Jan. 1st-June 30th |
|---|---|---|---|---|---|---|---|---|
| Typhus exanthém. | Typhus | C. | 14517 | 7138 | 4503 | 4469 | 3294 | 1340 |
| | | D. | 2804 | 1182 | 569 | 903 | 642 | 186 |
| Variole | Smallpox | C. | 9 | 15 | 11701 | 8494 | 3502 | 260 |
| | | D. | 6 | 13 | 5131 | 3621 | 1551 | 102 |

# CANADA

**Nombre de cas de maladies à déclaration obligatoire et de décès causés par ces maladies en 1924; par mois.**
**Number of Cases of and Deaths from Notifiable Diseases in 1924; by months.**

*Sources:* Rapport spécial, 1919 et 1920; Rapport annuel du « Ontario Provincial Board of Health », 1921 et 1922; « U.S. Public Health Reports », 1923; Rapports du Bureau de Statistique du Dominion, 1924. — Special Report, 1919 and 1920; Annual Report of the Ontario Provincial Board of Health, 1921 and 1922; U. S. Public Health Reports, 1923; Reports from the Dominion Bureau of Statistics, 1924.

| Maladie — Disease | | | Total 1924 | *a* Jan. Jan. | *a* Fév. Feb. | *a* Mars Mar. | *b* Avril April | *b* Mai May | *c* Juin June | Juil. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **CANADA (Total) (Population: 8 677 238*. R. 1. VI. 1921.)** | | | | | | | | | | | | | | | |
| Coqueluche | Whooping-cough | C. | 6414 | 654 | 780 | 509 | 412 | 384 | 391 | 357 | 518 | 629 | 435 | 816 | 529 |
| | | D. | 663 | 49 | 50 | 65 | 35 | 57 | 50 | 44 | 67 | 72 | 62 | 51 | 61 |
| Diphtérie | Diphtheria | C. | 9068 | 1067 | 898 | 814 | 619 | 601 | 583 | 584 | 559 | 577 | 939 | 1010 | 817 |
| | | D. | 977 | 109 | 120 | 86 | 73 | 65 | 49 | 46 | 52 | 51 | 100 | 119 | 107 |
| Fièvre typhoïde | Typhoid fever | C. | 2229 | 105 | 153 | 153 | 115 | 161 | 111 | 137 | 252 | 311 | 329 | 209 | 193 |
| | | D. | 445 | 33 | 41 | 39 | 37 | 32 | 21 | 27 | 34 | 39 | 47 | 51 | 44 |
| Grippe | Influenza | D. | 730 | 65 | 106 | 117 | 83 | 78 | 42 | 23 | 26 | 20 | 41 | 45 | 84 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | C. | 144 | 5 | 10 | 20 | 10 | 12 | 15 | 11 | 12 | 14 | 12 | 14 | 9 |
| | | D. | 175 | 11 | 13 | 18 | 7 | 15 | 13 | 16 | 10 | 15 | 22 | 20 | 15 |
| Oreillons | Mumps | C. | 8192 | 647 | 814 | 1629 | 1031 | 1073 | 763 | 173 | 238 | 119 | 348 | 694 | 663 |
| | | D. | 7 | 0 | 1 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 1 | 0 |
| Poliomyélite | Poliomyelitis | D. | 35 | 4 | 3 | 2 | 0 | 2 | 0 | 3 | 3 | 3 | 12 | 0 | 3 |
| Rougeole | Measles | C. | 39974 | 4467 | 3669 | 4748 | 4742 | 6317 | 5954 | 2691 | 1465 | 427 | 1225 | 2309 | 1960 |
| | | D. | 370 | 44 | 47 | 46 | 28 | 34 | 41 | 33 | 24 | 12 | 20 | 20 | 21 |
| Scarlatine | Scarlet fever | C. | 17340 | 1858 | 2026 | 2205 | 1540 | 1578 | 1423 | 830 | 788 | 682 | 1237 | 1555 | 1618 |
| | | D. | 393 | 44 | 42 | 53 | 34 | 31 | 32 | 19 | 25 | 14 | 27 | 31 | 41 |
| Variole | Smallpox | C. | 2791 | 505 | 553 | 385 | 307 | 245 | 137 | 66 | 83 | 93 | 185 | 112 | 120 |
| | | D. | 57 | 0 | 16 | 29 | 5 | 2 | 1 | 2 | 1 | 0 | 0 | 0 | 1 |
| **NOUVEAU-BRUNSWICK ET NOUVELLE-ÉCOSSE — NEW BRUNSWICK AND NOVA SCOTIA (Population: 911 713.)** | | | | | | | | | | | | | | | |
| Coqueluche | Whooping-cough | C. | 763 | 164 | 56 | 80 | 71 | 49 | 118 | 68 | 49 | 22 | 29 | 22 | 35 |
| | | D. | 47 | 11 | 6 | 7 | 1 | 0 | 2 | 0 | 3 | 3 | 4 | 1 | 9 |
| Diphtérie | Diphtheria | C. | 419 | 61 | 67 | 24 | 27 | 27 | 32 | 25 | 21 | 23 | 36 | 34 | 42 |
| | | D. | 45 | 11 | 5 | 5 | 4 | 1 | 3 | 1 | 2 | 0 | 8 | 3 | 2 |
| Fièvre typhoïde | Typhoid fever | C. | 313 | 13 | 6 | 5 | 15 | 24 | 24 | 21 | 56 | 76 | 44 | 14 | 15 |
| | | D. | 23 | 3 | 1 | 2 | 2 | 1 | 1 | 0 | 1 | 1 | 5 | 5 | 1 |
| Grippe | Influenza | D. | 41 | 12 | 9 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 3 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | C. | 12 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 3 | 3 | 1 | 0 |
| | | D. | 7 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 1 |
| Oreillons | Mumps | C. | *d* 242 | — | — | 10 | 15 | 40 | 33 | 27 | 24 | 12 | 13 | 26 | 42 |
| Poliomyélite | Poliomyelitis | D. | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| Rougeole | Measles | C. | 1498 | 272 | 276 | 234 | 160 | 124 | 189 | 80 | 19 | 11 | 4 | 57 | 72 |
| | | D. | 23 | 2 | 12 | 6 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Scarlatine | Scarlet fever | C. | 1299 | 195 | 122 | 125 | 93 | 109 | 95 | 76 | 89 | 92 | 116 | 87 | 100 |
| | | D. | 31 | 7 | 10 | 4 | 1 | 0 | 0 | 2 | 1 | 0 | 1 | 1 | 4 |
| Variole | Smallpox | C. | 50 | 1 | 7 | 3 | 9 | 0 | 3 | 21 | 3 | 2 | 0 | 0 | 1 |
| | | D. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **QUÉBEC (Population: 2 361 199).** | | | | | | | | | | | | | | | |
| Coqueluche | Whooping-cough | C. | 1168 | 68 | 267 | 144 | 42 | 18 | 78 | 93 | 73 | 92 | 60 | 141 | 92 |
| | | D. | 449 | 31 | 30 | 43 | 22 | 43 | 34 | 32 | 53 | 49 | 46 | 26 | 40 |
| Diphtérie | Diphtheria | C. | 1380 | 155 | 152 | 118 | 98 | 61 | 92 | 68 | 56 | 98 | 138 | 172 | 172 |
| | | D. | 397 | 53 | 58 | 41 | 28 | 28 | 16 | 18 | 11 | 26 | 32 | 39 | 47 |
| Fièvre typhoïde | Typhoid fever | C. | 759 | 45 | 112 | 115 | 55 | 70 | 28 | 27 | 39 | 54 | 97 | 52 | 65 |
| | | D. | 286 | 20 | 36 | 35 | 26 | 26 | 17 | 19 | 21 | 19 | 22 | 24 | 21 |
| Grippe | Influenza | D. | 515 | 45 | 76 | 83 | 69 | 64 | 34 | 21 | 14 | 10 | 24 | 26 | 49 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | C. | 21 | 2 | 1 | 3 | 1 | 0 | 3 | 5 | 1 | 2 | 1 | 1 | 1 |
| | | D. | 52 | 4 | 5 | 7 | 2 | 4 | 5 | 6 | 2 | 3 | 5 | 3 | 6 |
| Poliomyélite | Poliomyelitis | D. | 18 | 4 | 3 | 2 | 0 | 2 | 0 | 3 | 2 | 0 | 0 | 0 | 2 |
| Rougeole | Measles | C. | 5066 | 1517 | 392 | 735 | 593 | 329 | 401 | 235 | 56 | 34 | 138 | 287 | 349 |
| | | D. | 204 | 25 | 23 | 25 | 15 | 11 | 18 | 18 | 16 | 10 | 15 | 11 | 17 |
| Scarlatine | Scarlet fever | C. | 3137 | 184 | 361 | 420 | 327 | 319 | 390 | 216 | 131 | 124 | 283 | 63 | 319 |
| | | D. | 167 | 18 | 14 | 13 | 16 | 19 | 12 | 11 | 5 | 7 | 15 | 15 | 22 |
| Variole | Smallpox | C. | 173 | 4 | 134 | 8 | 8 | 1 | 5 | 5 | 1 | 1 | 0 | 3 | 3 |
| | | D. | 2 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |

Le nombre des décès pour les provinces suivantes n'est pas donné: — The number of deaths for the following provinces is not given:

*a* Saskatchewan et Colombie Britannique. — Saskatchewan and British Columbia.
*b* Nouvelle-Ecosse, Saskatchewan et Colombie Britannique. — Nova Scotia, Saskatchewan and British Columbia.
*c* Manitoba et Saskatchewan. — Manitoba and Saskatchewan
*d* Total pour dix mois seulement. — Total for ten months only.

* Ile du Prince Edouard non comprise. — Prince Edward Island not included.

## CANADA *(suite — continued).*

| Maladie — Disease | | | Total 1924 | a Jan. Jan. | a Fév. Feb. | a Mars Mar. | b Avril April | b Mai May | c Juin June | Juil. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **ONTARIO (Population: 2 933 662).** | | | | | | | | | | | | | | | |
| Coqueluche | Whooping-cough | C. | 2474 | 181 | 202 | 140 | 140 | 141 | 104 | 109 | 300 | 225 | 174 | 479 | 279 |
| | | D. | 56 | 6 | 5 | 10 | 4 | 4 | 3 | 4 | 4 | 5 | 3 | 5 | 3 |
| Diphtérie | Diphtheria | C. | 3475 | 318 | 294 | 250 | 188 | 270 | 227 | 220 | 269 | 189 | 397 | 484 | 369 |
| | | D. | 271 | 25 | 38 | 25 | 20 | 26 | 12 | 12 | 16 | 6 | 24 | 40 | 27 |
| Fièvre typhoïde | Typhoid fever | C. | 849 | 38 | 23 | 25 | 34 | 56 | 47 | 77 | 122 | 117 | 125 | 100 | 85 |
| | | D. | 81 | 5 | 3 | 2 | 7 | 2 | 1 | 4 | 8 | 13 | 8 | 16 | 12 |
| Grippe | Influenza | D. | 109 | 6 | 15 | 21 | 14 | 14 | 6 | 2 | 3 | 1 | 4 | 10 | 13 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | C. | 77 | 1 | 2 | 9 | 6 | 9 | 9 | 2 | 9 | 7 | 7 | 11 | 5 |
| | | D. | 55 | 1 | 1 | 7 | 2 | 8 | 5 | 1 | 5 | 7 | 6 | 8 | 4 |
| Oreillons | Mumps | C. | 7632 | 627 | 787 | 1578 | 1009 | 978 | 729 | 141 | 180 | 100 | 307 | 614 | 582 |
| | | D. | 6 | 0 | 1 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Poliomyélite | Poliomyelitis | D. | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 0 | 0 |
| Rougeole | Measles | C. | 25694 | 1243 | 1943 | 3002 | 3399 | 4748 | 4471 | 1645 | 894 | 239 | 889 | 1847 | 1374 |
| | | D. | 65 | 7 | 4 | 9 | 4 | 13 | 12 | 8 | 3 | 0 | 0 | 3 | 2 |
| Scarlatine | Scarlet fever | C. | 7332 | 870 | 940 | 1134 | 691 | 659 | 510 | 267 | 337 | 195 | 397 | 714 | 618 |
| | | D. | 118 | 13 | 10 | 28 | 12 | 8 | 14 | 3 | 7 | 1 | 3 | 10 | 9 |
| Variole | Smallpox | C. | 594 | 50 | 125 | 166 | 49 | 32 | 24 | 7 | 6 | 13 | 73 | 16 | 33 |
| | | D. | 47 | 0 | 14 | 28 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **MANITOBA, SASKATCHEWAN ET ALBERTA — MANITOBA, SASKATCHEWAN AND ALBERTA (Population: 1 956 082).** | | | | | | | | | | | | | | | |
| Coqueluche | Whooping-cough | C. | 1894 | 237 | 254 | 138 | 154 | 168 | 77 | 68 | 87 | 280 | 160 | 172 | 99 |
| | | D. | 102 | 1 | 9 | 5 | 8 | 10 | 6 | 5 | 7 | 14 | 9 | 19 | 9 |
| Diphtérie | Diphtheria | C. | 3152 | 453 | 326 | 353 | 261 | 190 | 183 | 167 | 190 | 215 | 322 | 286 | 206 |
| | | D. | 243 | 20 | 19 | 15 | 21 | 10 | 14 | 13 | 23 | 15 | 30 | 34 | 29 |
| Fièvre typhoïde | Typhoid fever | C. | 256 | 8 | 6 | 8 | 11 | 10 | 10 | 11 | 30 | 53 | 46 | 38 | 25 |
| | | D. | 54 | 5 | 1 | 0 | 2 | 3 | 2 | 4 | 4 | 5 | 12 | 6 | 10 |
| Grippe | Influenza | D. | 65 | 2 | 6 | 0 | 0 | 0 | 2 | 0 | 9 | 9 | 9 | 9 | 19 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | C. | 33 | 2 | 6 | 8 | 2 | 2 | 3 | 3 | 1 | 2 | 0 | 1 | 3 |
| | | D. | 61 | 6 | 6 | 4 | 3 | 3 | 3 | 9 | 3 | 5 | 6 | 9 | 4 |
| Oreillons | Mumps | C. | 269 | 17 | 26 | 40 | 6 | 49 | 1 | 4 | 34 | 7 | 25 | 30 | 30 |
| | | D. | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Poliomyélite | Poliomyelitis | D. | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 7 | 0 | 1 |
| Rougeole | Measles | C. | 6254 | 688 | 634 | 599 | 563 | 1082 | 866 | 721 | 494 | 142 | 192 | 114 | 159 |
| | | D. | 66 | 10 | 8 | 7 | 8 | 9 | 2 | 4 | 5 | 2 | 5 | 6 | 2 |
| Scarlatine | Scarlet fever | C. | 4034 | 490 | 430 | 364 | 284 | 376 | 339 | 211 | 177 | 210 | 315 | 461 | 377 |
| | | D. | 68 | 6 | 8 | 8 | 5 | 4 | 1 | 2 | 10 | 6 | 8 | 4 | 6 |
| Variole | Smallpox | C. | 1242 | 394 | 219 | 130 | 144 | 86 | 48 | 25 | 27 | 39 | 60 | 45 | 25 |
| | | D. | 7 | 0 | 2 | 1 | 1 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 |
| **COLOMBIE BRITANNIQUE — BRITISH COLUMBIA (Population: 524 582).** | | | | | | | | | | | | | | | |
| Coqueluche | Whooping-cough | C. | 115 | 4 | 1 | 7 | 5 | 8 | 14 | 19 | 9 | 10 | 12 | 2 | 24 |
| | | D. | d 9 | — | — | — | — | — | 5 | 3 | 0 | 1 | 0 | 0 | 0 |
| Diphtérie | Diphtheria | C. | 642 | 80 | 59 | 69 | 45 | 53 | 49 | 104 | 23 | 52 | 46 | 34 | 28 |
| | | D. | d 21 | — | — | — | — | — | 4 | 2 | 0 | 4 | 6 | 3 | 2 |
| Fièvre typhoïde | Typhoid fever | C. | 52 | 1 | 6 | 0 | 0 | 1 | 2 | 1 | 5 | 11 | 17 | 5 | 3 |
| | | D. | d 1 | — | — | — | — | — | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Grippe | Influenza | D. | d 0 | — | — | — | — | — | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | C. | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| | | D. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Oreillons | Mumps | C. | 49 | 3 | 1 | 1 | 1 | 6 | 0 | 1 | 0 | 0 | 3 | 24 | 9 |
| | | D. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Poliomyélite | Poliomyelitis | D. | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Rougeole | Measles | C. | 1463 | 747 | 424 | 178 | 27 | 34 | 27 | 10 | 2 | 1 | 2 | 4 | 6 |
| | | D. | d 10 | — | — | — | — | — | 8 | 2 | 0 | 0 | 0 | 0 | 0 |
| Scarlatine | Scarlet fever | C. | 1538 | 119 | 173 | 162 | 145 | 115 | 89 | 60 | 54 | 61 | 126 | 230 | 204 |
| | | D. | d 9 | — | — | — | — | — | 5 | 1 | 2 | 0 | 0 | 1 | 0 |
| Variole | Smallpox | C. | 732 | 56 | 68 | 78 | 97 | 126 | 57 | 8 | 46 | 38 | 52 | 48 | 58 |
| | | D. | d 1 | — | — | — | — | — | 0 | 0 | 0 | 0 | 0 | 0 | 1 |

Le nombre des décès pour les provinces suivantes n'est pas donné : — The number of deaths for the following provinces is not given :

*a* Saskatchewan et Colombie Britannique. — Saskatchewan and British Columbia.
*b* Nouvelle-Ecosse, Saskatchewan et Colombie Britannique. — Nova Scotia, Saskatchewan and British Columbia.
*c* Manitoba et Saskatchewan. — Manitoba and Saskatchewan.
*d* Total pour sept mois seulement. — Total for seven months only.

ONTARIO: Données pour les années précédentes: — ONTARIO: Data for previous years:

| | Coqueluche Whooping-cough | | Diphtérie Diphtheria | | Fièvre typhoïde Typhoid fever | | Grippe Influenza | Méningite cérébro-spinale Cerebro-spinal meningitis | | Poliomyélite Poliomyelitis | | Rougeole Measles | | Scarlatine Scarlet fever | | Variole Smallpox | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | C. | D. | C. | D. | C. | D. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D |
| 1920 . . . . | 2042 | 210 | 5940 | 654 | 713 | 182 | 2411 | 77 | 67 | 37 | 14 | 15423 | 210 | 5130 | 150 | 5639 | 33 |
| 1921 . . . . | 2307 | 131 | 6313 | 525 | 725 | 184 | 159 | 79 | 66 | 81 | 20 | 2851 | 40 | 4564 | 126 | 3777 | 18 |
| 1922 . . . . | 1691 | 90 | 3529 | 410 | 576 | 127 | 375 | 71 | 64 | 205 | 25 | 8950 | 40 | 3950 | 111 | 977 | 6 |
| 1923 . . . . | 3205 | 181 | 2935 | 244 | 1665 | 212 | 874 | 64 | 59 | 19 | 10 | 10843 | 70 | 5011 | 131 | 335 | 0 |

## CUBA

(Population: 3 260 649. E. 31 déc. 1924.)

**Nombre de cas de maladies à déclaration obligatoire déclarés en 1919-1924; par décades en 1924.**
**Number of Cases of Notifiable Diseases reported, 1919-1924; by ten-day periods in 1924.**

*Source:* Boletín Decenal Epidemiológico Sanitario. Rapport du Ministère de la Santé publique. — Report from Ministry of Public Health.

| Décade finissant le: Decade ending: | | Diphtérie Diphtheria | Fièvre paratyphoïde Paratyphoid fever | Fièvre typhoïde Typhoid fever | Méningite cér.-spin. Cer.-spin. mening. | Paludisme Malaria | Rougeole Measles | Scarlatine Scarlet fever | Tétanos infantile Infantile tetanus | Varicelle Chickenpox |
|---|---|---|---|---|---|---|---|---|---|---|
| Total 1919 . . . . . | | — | 2.347 | | — | 4.368 | — | — | — | — |
| Total 1920 . . . . . | | — | 2.190 | | — | 4.231 | — | — | — | — |
| Total 1921 . . . . . | | — | 9.592 | | — | 7.356 | — | — | — | — |
| Total 1922 . . . . . | | — | 2.773 | | — | 5.739 | — | — | — | — |
| Total 1923 . . . . . | | 315 | 3.001 | | 6 | 4.968 | 92 | 72 | 19 *a* | 800 |
| Total 1924 . . . . . | | 288 | 243 | 2.879 | 12 | 4.400 | 421 | 49 | 12 | 719 |
| Janvier — January | 10 | 11 | 2 | 21 | 1 | 133 | 6 | 1 | 0 | 19 |
| | 20 | 11 | 2 | 10 | 1 | 137 | 4 | 0 | 0 | 26 |
| | 31 | 9 | 2 | 16 | 0 | 113 | 14 | 2 | 0 | 17 |
| Février — February | 10 | 12 | 2 | 15 | 1 | 94 | 10 | 1 | 1 | 3 |
| | 20 | 6 | 5 | 31 | 0 | 135 | 6 | 3 | 0 | 27 |
| | 29 | 8 | 2 | 37 | 0 | 115 | 13 | 2 | 1 | 38 |
| Mars — March | 10 | 6 | 3 | 53 | 0 | 125 | 8 | 3 | 1 | 104 |
| | 20 | 10 | 5 | 58 | 0 | 143 | 51 | 1 | 0 | 74 |
| | 31 | 12 | 5 | 43 | 3 | 129 | 24 | 1 | 2 | 53 |
| Avril — April | 10 | 15 | 4 | 80 | 0 | 127 | 24 | 4 | 0 | 99 |
| | 20 | 11 | 12 | 60 | 0 | 82 | 39 | 0 | 0 | 67 |
| | 30 | 9 | 17 | 120 | 0 | 69 | 44 | 1 | 0 | 87 |
| Mai — May | 10 | 11 | 9 | 76 | 1 | 94 | 5 | 2 | 0 | 24 |
| | 20 | 8 | 7 | 75 | 1 | 94 | 11 | 2 | 0 | 16 |
| | 31 | 12 | 9 | 88 | 0 | 121 | 7 | 1 | 0 | 18 |
| Juin — June | 10 | 10 | 20 | 58 | 0 | 48 | 8 | 3 | 0 | 13 |
| | 20 | 8 | 7 | 84 | 0 | 205 | 5 | 3 | 0 | 3 |
| | 30 | 2 | 34 | 241 | 2 | 125 | 10 | 0 | 0 | 3 |
| Juillet — July | 10 | 4 | 14 | 338 | 0 | 129 | 11 | 2 | 1 | 1 |
| | 20 | 8 | 7 | 232 | 0 | 113 | 8 | 0 | 0 | 0 |
| | 31 | 6 | 10 | 168 | 0 | 88 | 15 | 0 | 0 | 1 |
| Août — August | 10 | 9 | 14 | 147 | 0 | 73 | 10 | 1 | 0 | 0 |
| | 20 | 2 | 7 | 120 | 0 | 77 | 4 | 0 | 0 | 2 |
| | 31 | 9 | 6 | 140 | 0 | 73 | 6 | 1 | 2 | 2 |
| Septembre — September | 10 | 5 | 4 | 74 | 0 | 59 | 8 | 3 | 0 | 1 |
| | 20 | 8 | 6 | 61 | 0 | 61 | 9 | 1 | 0 | 1 |
| | 30 | 5 | 9 | 61 | 0 | 77 | 10 | 3 | 0 | 1 |
| Octobre — October | 10 | 2 | 4 | 60 | 0 | 86 | 0 | 0 | 1 | 1 |
| | 20 | 3 | 3 | 43 | 0 | 98 | 6 | 0 | 1 | 0 |
| | 31 | 7 | 2 | 48 | 0 | 179 | 1 | 1 | 0 | 2 |
| Novembre — November | 10 | 9 | 1 | 35 | 0 | 188 | 2 | 2 | 0 | 0 |
| | 20 | 5 | 1 | 45 | 1 | 259 | 0 | 1 | 1 | 1 |
| | 30 | 5 | 4 | 35 | 0 | 189 | 25 | 1 | 0 | 9 |
| Décembre — December | 10 | 9 | 2 | 36 | 1 | 236 | 2 | 1 | 0 | 2 |
| | 20 | 9 | 0 | 40 | 0 | 166 | 10 | 0 | 1 | 2 |
| | 31 | 12 | 2 | 30 | 0 | 160 | 5 | 2 | 0 | 2 |

| | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|
| Variole. . . / Smallpox . . | 54 | 817 | 7,339 | 1,086 | 13 | 0 |

Pas de cas de choléra asiatique, de fièvre jaune, d'ictère grave, de morve, de peste ou de typhus exanthématique. — No case of Asiatic cholera, yellow fever, icterus gravis, glanders, plague or typhus.

## ÉQUATEUR, VILLE DE GUAYAQUIL — ECUADOR, CITY OF GUAYAQUIL

(Population: 100 000. E. 1921.)

**Nombre de cas de peste et de variole et de décès causés par ces maladies déclarés en 1920-1924; par mois en 1924.**
**Number of Cases of and Deaths from Plague and Smallpox reported in 1920-1924; by months in 1924.**

*Sources:* Boletin Sanitario (et — and) Informe, 1922-1924, del Director-General de Sanidad Publica.

| Maladie — Disease | | | Total 1920 | Total 1921 | Total 1922 | Total 1923 | Total 1924 | Jan. Jan. | Fév. Feb. | Mars Mar. | Avril April | Mai May | Juin June | Juil. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ville de — City of Guayaquil | | | | | | | | | | | | | | | | | | | |
| Peste | Plague | C. | 187 | 270 | 56 | 94 | 132 | 50 | 40 | 15 | 7 | 4 | 2 | 0 | 2 | 0 | 1 | 8 | 3 |
| | | D. | 55 | 95 | 19 | 31 | 39 | 16 | 9 | 7 | 3 | 0 | 1 | 0 | 0 | 0 | 1 | 2 | 0 |
| Variole | Smallpox | C. | — | — | 58 | 18 | 8 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 |
| | | D. | — | — | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Autres localités — Other Localities | | | | | | | | | | | | | | | | | | | |
| Peste | Plague | C. | — | — | — | 32 | 16 | 3 | 0 | 1 | 6 | 1 | 2 | 1 | 0 | 1 | 1 | 0 | 0 |
| | | D. | — | — | — | 11 | 8 | 2 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 1 |
| Variole | Smallpox | C. | — | — | — | 150* | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | D. | — | — | — | 5 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

* Chiffre approximatif. — Approximate number.

# ETATS-UNIS. — UNITED STATES.

(Population: 105 710 620. R. 1er janv. 1920).

## Nombre de cas de maladies contagieuses déclarés en 1924, par Etats. — Number of Cases of Certain Communicable Diseases Reported in 1924; by States.

Source: Information reçue du Service de la Santé publique des Etats-Unis. — Information received from the United States Public Health Service.

| Etat / State | | Population estimée au 1er juillet 1924 Estimated population July 1st 1924 | Anthrax Anthrax | Méningite cérébro-spinale Cerebro-spinal meningitis | Varicelle Chickenpox | Dengue Dengue | Diphtérie Diphtheria | Encéphalite léthargique Encephalitis lethargica | Grippe Influenza | Paludisme Malaria | Rougeole Measles | Oreillons Mumps | Pellagre Pellagra | Pneumonie Pneumonia | Poliomyélite Poliomyelitis | Rage des animaux Rabies in animals | Rage humaine Rabies in man | Fièvre des mont. Roch** Rocky Mtn. spott. ed fever | Scarlatine Scarlet fever | Angine septique Septic sore throat | Variole Smallpox | Tuberculose (ttes formes) Tuberculosis (all forms) | Tuberculose (pulmonaire) Tuberculosis (pulmonary) | Fièvre typhoïde Typhoid fever | Typhus exanthématique Typhus fever | Coqueluche Whooping-cough | Lèpre Leprosy | Peste Plague | Trachome Trachoma |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ama | Alabama | 2,445,551 | 2 | 46 | 1,927 | 20 | 1,090 | 10 | 3,282 | 4,280 | 12,188 | 1,961 | 390 | 4,370 | 24 | — | — | — | 651 | — | 2,241 | 1,715 | — | 1,817 | 11 | 2,324 | 1 | — | — |
| ona | Arizona | 394,331 | — | — | 180 | — | 146 | — | — | 3 | 2,102 | 280 | — | — | 3 | — | 4 | — | 397 | — | 160 | — | — | 99 | — | 84 | 2 | — | 407 |
| ansas | Arkansas | 1,834,596 | — | 10 | 1,020 | 9 | 248 | — | 3,979 | 4,039 | 6,279 | 841 | 312 | — | 4 | — | — | — | 309 | — | 467 | — | 532 | 974 | — | 1,786 | — | — | 54 |
| ornie | California | 3,913,236 | 5 | 109 | 13,723 | — | 11,110 | 136 | 1,106 | 107 | 27,373 | 2,819 | 38 | 3,658 | 192 | 502 | 6 | 6 | 8,955 | — | 9,425 | 9,663 | 9,424 | 1,777 | 17 | 3,176 | 22 | 40 | 1,065 |
| rado | Colorado | 1,004,803 | 1 | 9 | 2,655 | — | 1,462 | 1 | 46 | 4 | 9,378 | 2,088 | — | 234 | 8 | — | 1 | 5 | 1,618 | 13 | 74 | 2,585 | — | 221 | — | 1,177 | — | — | 7 |
| necticut | Connecticut | 1,503,869 | — | 47 | 2,595 | — | 2,110 | 56 | — | 37 | 4,626 | 3,549 | — | 1,283 | 120 | 6 | — | — | 5,658 | 66 | 100 | 1,736 | 1,569 | 238 | — | 2,237 | — | — | 6 |
| ware | Delaware | 232,590 | — | 13 | 160 | — | 194 | — | 66 | 28 | 192 | 188 | — | — | — | — | — | — | 399 | 2 | 1 | 368 | 266 | 55 | — | 181 | — | — | — |
| rict de | District of | | | | | | | | | | | | | | 23 | 23 | — | — | 1,260 | — | 147 | 1,330 | 1,263 | 133 | — | 487 | 1 | — | — |
| olombie | Columbia | 486,936 | — | 2 | 1,625 | — | 398 | 8 | 66 | — | 425 | — | 1 | — | 6 | 163 | — | — | 141 | — | 118 | 1,349 | — | 553 | 4 | 428 | 7 | — | 15 |
| ide | Florida | 1,068,520 | — | 22 | 401 | 75 | 560 | 7 | 304 | 933 | 3,241 | 520 | 109 | 963 | 10 | — | — | — | 407 | 50 | 2,107 | 666 | 652 | 601 | 2 | 946 | 2 | — | 3 |
| rgie | Georgia | 3,028,728 | — | 4 | 818 | 8 | 1,012 | — | 1,223 | 763 | 3,622 | 861 | 45 | 1,151 | | | | | | | | | | | | | | | |
| ho | Idaho | 481,125 | — | — | 558 | — | 146 | — | — | — | 3,264 | — | — | 25 | 11 | — | — | 9 | 309 | — | 547 | — | — | 146 | — | 130 | — | — | — |
| ois | Illinois | 6,877,737 | 3 | 81 | 13,864 | — | 6,859 | 87 | 1,302 | 57 | 20,144 | 11,369 | 4 | 14,217 | 257 | — | 3 | — | 11,702 | 85 | 1,357 | 15,041 | 14,697 | 1,469 | — | 8,238 | 7 | — | 66 |
| ana | Indiana | 3,036,775 | 2 | 40 | 4,540 | — | 3,088 | 3 | 1,309 | — | 13,277 | 95 | — | — | 78 | — | — | — | 4,322 | 1 | 3,751 | — | — | 744 | — | 2,644 | — | — | — |
| a | Iowa | 2,487,106 | — | 14 | 649 | — | 860 | — | — | — | 3,701 | 1,048 | — | 48 | 65 | — | — | — | 1,884 | — | 872 | 5 | — | — | — | 336 | — | — | — |
| sas | Kansas | 1,805,555 | 2 | 59 | 4,148 | — | 1,706 | 8 | 332 | 14 | 20,263 | 7,483 | 11 | 1,890 | 27 | — | 4 | — | 2,348 | 10 | 1,154 | 2,554 | 2,311 | 582 | — | 3,359 | — | — | 73 |
| tucky | Kentucky | 2,475,370 | — | 23 | 552 | — | 724 | — | 655 | 17 | 3,142 | 562 | 9 | — | 17 | — | — | — | 736 | — | 322 | — | — | 707 | — | 744 | — | — | — |
| isiane | Louisiana | 1,864,385 | 18 | 23 | 281 | 1 | 935 | 14 | 974 | 859 | 6,016 | 30 | 163 | 1,866 | 17 | — | 1 | — | 385 | 10 | 488 | — | 1,746 | 1,037 | — | 303 | 15 | 1 | 50 |
| ne | Maine | 779,900 | 1 | 17 | 1,789 | — | 585 | 1 | 298 | 2 | 3,144 | 1,955 | 2 | 561 | 139 | — | — | — | 1,305 | 36 | 19 | 480 | — | 338 | — | 1,537 | — | — | 2 |
| yland | Maryland | 1,521,190 | — | 17 | 4,637 | — | 1,838 | 49 | 2,089 | 59 | 5,896 | 1,031 | 1 | 3,810 | 191 | 29 | — | — | 2,843 | 96 | 94 | 2,988 | — | 990 | 3 | 2,684 | — | — | 61 |
| sachusetts | Massachusetts | 4,077,599 | 10 | 128 | 8,985 | — | 7,344 | 114 | 405 | 36 | 22,417 | 9,433 | 15 | 4,552 | 276 | — | 1 | — | 14,409 | 169 | 12 | 7,055 | 5,992 | 574 | — | 4,057 | — | — | — |
| nigan | Michigan | 4,066,223 | — | — | 10,452 | — | 6,012 | 37 | 108 | 2 | 18,290 | 7,895 | 2 | 4,664 | 647 | — | 11 | — | 12,995 | 260 | 4,527 | 5,570 | — | 782 | — | 4,364 | — | — | — |
| nesota | Minnesota | 2,531,473 | — | 30 | 6,227 | — | 3,865 | 16 | 48 | — | 5,835 | — | — | 243 | 116 | — | — | — | 9,785 | — | 3,067 | 3,532 | — | 323 | — | 1,369 | 2 | — | 48 |
| sissippi | Mississippi | 1,790,618[1] | 68 | 10 | 6,386 | 191 | 1,217 | — | 20350 | 79,631 | 25 697 | 8,100 | 5,896 | 14,286 | 25 | 176 | 9 | — | 474 | — | 711 | 3,508 | — | 2,470 | — | 11,035 | — | — | 173 |
| souri | Missouri | 3,455,376 | 2 | 43 | 2,043 | — | 3,116 | 1 | 563 | 117 | 10,696 | 3,704 | 1 | 663 | 28 | 8 | 1 | — | 6,628 | 77 | 635 | 2,201 | — | 672 | — | 1,866 | — | — | 689 |
| tana | Montana | 629,003 | — | 17 | 714 | — | 549 | 13 | 68 | — | 6,049 | 67 | — | 83 | 183 | — | — | 47 | 1,042 | 17 | 959 | 672 | — | 130 | — | 485 | — | — | 1 |
| raska | Nebraska | 1,344,652 | — | 10 | 999 | — | 861 | 4 | 42 | — | 6,998 | 189 | — | 63 | 14 | — | — | — | 962 | 20 | 286 | 185 | — | 45 | — | 382 | — | — | — |
| ada | Nevada [2] | 77,407[1] | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| veau Hampshire | New Hampshire [2] | 448,882* | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| v-Jersey | New Jersey | 3,442,695 | 4 | 106 | 8,595 | — | 4,370 | — | 741 | 34 | 15,507 | — | — | 6,024 | 89 | — | 3 | — | 6,317 | — | 311 | 5,066 | — | 632 | — | 7,898 | — | — | 29 |
| v-Mexico | New Mexico | 375,669 | 1 | 4 | 539 | — | 503 | 6 | 81 | 13 | 4,244 | 311 | 5 | 352 | 6 | 4 | — | — | 311 | 8 | 31 | 1,105 | — | 489 | — | 379 | — | — | 10 |
| v-York | New York | 10,974,642 | 14 | 237 | 22,478 | — | 15,571 | 531 | 2,999 | 112 | 70,199 | 15,318 | — | 29,526 | 1,210 | — | — | — | 21,586 | 351 | 491 | 21,266 | 20,113 | 3,303 | 13 | 21,619 | — | — | 95 |
| oline du Nord | North Carolina | 2,722,669 | — | 30 | 5,981 | — | 4,091 | — | — | — | 34,929 | — | — | — | 13 | — | — | — | 2,250 | 143 | 3,659 | — | — | 1,319 | — | 13,005 | — | — | 2 |
| kota | North Dakota | 679,232 | — | — | 694 | — | 410 | 3 | 26 | — | 4,388 | 110 | — | 489 | 72 | — | 7 | — | 1,779 | — | 575 | 228 | — | 111 | — | 616 | — | — | 19 |
| u Nord | Dakota | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| o | Ohio | 6,219,330 | 3 | 54 | 14,488 | — | 6,223 | 48 | 437 | 13 | 14,596 | 12,199 | — | 4,090 | 157 | — | — | — | 13,651 | 543 | 5,334 | 6,783 | — | 1,450 | — | 10,516 | — | — | 161 |
| ahoma | Oklahoma | 2,200,307 | — | — | 575 | 1 | 715 | — | 864 | 304 | 4,066 | 80 | 27 | — | 7 | 59 | 4 | — | 622 | 14 | 1,007 | — | 96 | 1,044 | — | 368 | — | — | 41 |
| gon | Oregon | 834,665 | — | 2 | 939 | — | 1,361 | 22 | 44 | 4 | 5,241 | 220 | 1 | 70 | 64 | 14 | — | 5 | 1,090 | 8 | 800 | 739 | — | 186 | — | 231 | 1 | — | 1 |
| nsylvanie | Pennsylvania | 9,208,986 | — | 72 | — | — | 12,597 | 74 | — | 13 | — | — | 3 | — | 153 | — | — | — | 18,468 | — | 118 | — | — | 2,092 | — | — | — | — | — |
| de Rhode | Rhode Island | 633,036 | — | 7 | 323 | — | 749 | 1 | 12 | 5 | 230 | 304 | — | 56 | 18 | 1 | — | — | 2,584 | 17 | 3 | 495 | 437 | 79 | — | 200 | — | — | — |
| oline Sud | South Carolina | 1,761,746 | — | — | 485 | — | 2,348 | — | 487 | 252 | 4,256 | 1,026 | 48 | — | 11 | 318 | 1 | — | 95 | 38 | 693 | — | — | 450 | — | 793 | — | — | 3 |
| kota d. Sud | South Dakota | 660,956 | 1 | 7 | 909 | — | 420 | — | — | — | 6,604 | 151 | — | — | 38 | — | — | 2 | 2,298 | — | 286 | — | — | 169 | — | 523 | — | — | 24 |
| nessée | Tennessee | 2,408,846 | — | 27 | 2,401 | — | 788 | — | 3,460 | 1,082 | 7,626 | — | 742 | 1,296 | 20 | — | — | — | 905 | — | 3,100 | 1,726 | — | 1,465 | — | 3,156 | — | — | 139 |
| as | Texas | 5,918,602 | 32 | 13 | 1,959 | 369 | 1,711 | — | 3,827 | 16,068 | 12,631 | 2,961 | 665 | 1,109 | 17 | — | 11 | — | 1,160 | — | 1,380 | 2,448 | — | 1,238 | 69 | 2,139 | — | — | — |
| h | Utah | 484,645 | — | 14 | 5,022 | — | 613 | — | 1,695 | — | 17,647 | 85 | — | 805 | 4 | — | — | 8 | 570 | — | 123 | — | 74 | 424 | — | 1,120 | 1 | — | — |
| mont | Vermont | 352,428* | — | — | 1,417 | — | 212 | — | — | — | 3,404 | 784 | — | — | 11 | — | — | — | 634 | 2 | 64 | — | 198 | 23 | — | 1,752 | — | — | — |
| ginie | Virginia | 2,423,942 | — | 76 | 6,703 | — | 3,185 | 1 | 24322 | 2,268 | 15,645 | — | 158 | — | 117 | — | — | — | 2,238 | — | 285 | — | 3,261 | 1,358 | — | 15,856 | — | — | — |
| shington | Washington | 1,456,106 | — | 18 | 3,594 | — | 1,615 | 16 | — | — | 21,259 | 1,397 | — | 242 | 590 | 1 | — | 6 | 2,154 | 3 | 1,932 | 2,026 | — | 413 | — | 677 | — | — | 2 |
| ginie occ. | West Virginia | 1,576,143 | — | 21 | 1,883 | — | 1,291 | — | 1,440 | — | 2,050 | — | — | — | 24 | — | — | — | 1,745 | — | 434 | 531 | — | 1,019 | — | 3,547 | — | — | — |
| sconsin | Wisconsin | 2,770,291 | 1 | 58 | 9,674 | — | 2,775 | 28 | 1,178 | — | 10,925 | 1,940 | — | — | 68 | — | — | 1 | 8,598 | — | 1,236 | 1,972 | — | 261 | — | 6,535 | 1 | — | 10 |
| oming | Wyoming | 216,853 | — | — | 522 | — | 60 | 1 | — | — | 2,454 | 277 | — | — | — | — | — | 27 | 273 | 2 | 43 | — | — | 45 | — | 269 | — | — | 2 |
| | Total | 112,085,325[3] | 170 | 1,520 | 181,108 | 674 | 119,74 | 1,296 | 80138 | 111,056 | 502,146 | 103,222 | 8,648 | 102,689 | 5,170 | 1,304 | 67 | 116 | 183,253 | 2,041 | 55,537 | 107,588 | 62,631 | 35,047 | 119 | 147,558 | 62 | 41 | 3,260 |

*te.* — A noter que ces données sont provisoires, attendu que certains Etats n'ont pas encore envoyé de rapports définitifs. — *Note.* — These figures are provisional, as final reports have not been received from many of the States.

[1] Population estimée au 1er janvier 1920. — Estimated population January 1st, 1920.

[2] Pas de rapports. — No reports received.

Pas de choléra asiatique. — No case of Asiatic cholera.

Fièvre jaune. 1 cas en sept., importé. — Yellow fever, 1 case in September, imported.

## ÉTATS-UNIS — UNITED STATES

**Variation mensuelle des cas de maladies contagieuses déclarés dans les Etats-Unis pendant l'année 1924.**
**Monthly Variation in Reported Cases of Communicable Diseases in the United States, 1924.**

*Source:* Information reçue du Service de la Santé publique des Etats-Unis. — Information received from the United States Public Health Service.

| Maladie — Disease | | Nombre d'Etats[1] Number of States[1] | Total Total | Janv. Jan. | Fév. Feb. | Mars March | Avril April | Mai May | Juin June | Juillet July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Angine septique | Septic sore throat | 26 | 2041 | 177 | 186 | 223 | 119 | 149 | 128 | 131 | 144 | 105 | 165 | 210 | 304 |
| Anthrax | Anthrax | 18 | 170 | 11 | 9 | 8 | 5 | 3 | 22 | 20 | 10 | 38 | 15 | 16 | 13 |
| Coqueluche | Whooping-cough | 46* | 147558 | 16693 | 16169 | 17093 | 14590 | 13944 | 12305 | 12926 | 10092 | 8391 | 7838 | 8339 | 9178 |
| Dengue | Dengue | 8 | 674 | 33 | 33 | 33 | 37 | 3 | 25 | 22 | 58 | 112 | 104 | 105 | 109 |
| Diphtérie | Diphtheria | 47* | 119743 | 15069 | 11395 | 10494 | 9184 | 8411 | 7313 | 6054 | 5742 | 8230 | 13016 | 13092 | 11743 |
| Encéphalite léthargique | Encephalitis lethargica | 29* | 1296 | 96 | 96 | 126 | 145 | 123 | 107 | 87 | 90 | 85 | 101 | 73 | 167 |
| Fièvre des Montagnes rocheuses | Rocky Mountain spotted fever | 10 | 116 | 0 | 1 | 5 | 25 | 39 | 28 | 10 | 3 | 1 | 0 | 2 | 2 |
| Fièvre typhoïde | Typhoid fever | 46* | 35047 | 1810 | 1306 | 1294 | 1210 | 1605 | 2181 | 4251 | 5525 | 5230 | 4480 | 3028 | 3127 |
| Grippe | Influenza | 37* | 80138 | 11281 | 14702 | 12321 | 7460 | 3059 | 1000 | 984 | 1080 | 1543 | 3803 | 8146 | 14759 |
| Méningite cérébro-spin. | Cerebro-spinal meningit. | 39* | 1520 | 160 | 135 | 155 | 164 | 135 | 106 | 119 | 116 | 117 | 113 | 106 | 94 |
| Oreillons | Mumps | 38 | 103222 | 8269 | 11761 | 17640 | 17193 | 16538 | 8830 | 3381 | 1632 | 1808 | 3094 | 4956 | 8120 |
| Paludisme | Malaria | 31 | 111056 | 4410 | 4159 | 5153 | 6469 | 8779 | 13868 | 16858 | 18274 | 13502 | 9531 | 6077 | 3976 |
| Pellagre | Pellagra | 24* | 8648 | 233 | 282 | 344 | 726 | 1394 | 1528 | 1118 | 741 | 737 | 658 | 484 | 403 |
| Pneumonie, toutes formes | Pneumonia, all forms | 31 | 102689 | 12633 | 14472 | 14873 | 12817 | 8235 | 5513 | 3305 | 2654 | 2711 | 5015 | 8096 | 12365 |
| Poliomyélite | Poliomyelitis | 45* | 5170 | 77 | 62 | 64 | 52 | 63 | 65 | 242 | 937 | 1563 | 1189 | 614 | 242 |
| Rage humaine | Rabies in man | 16 | 67 | 5 | 2 | 3 | 9 | 6 | 3 | 4 | 9 | 8 | 5 | 2 | 10 |
| Rougeole | Measles | 46* | 502146 | 81124 | 101908 | 108505 | 86934 | 60330 | 33378 | 10844 | 2856 | 1845 | 3235 | 4067 | 7120 |
| Scarlatine | Scarlet fever | 47* | 183253 | 23933 | 22480 | 23734 | 19993 | 15897 | 10811 | 5841 | 4209 | 6377 | 12703 | 16658 | 20627 |
| Tuberculose, toutes formes | Tuberculosis, all forms | 32* | 107588 | 9164 | 8065 | 8996 | 10515 | 9801 | 9020 | 9872 | 9233 | 8173 | 9141 | 7936 | 7672 |
| Tuberculose pulmonaire | Tuberculosis, pulmonary | 16* | 62631 | 5685 | 4674 | 5320 | 6131 | 5487 | 5335 | 5863 | 5449 | 4425 | 5314 | 4522 | 4426 |
| Typhus | Typhus fever | 7 | 119 | 4 | 3 | 4 | 3 | 3 | 2 | 23 | 20 | 15 | 15 | 17 | 10 |
| Varicelle | Chickenpox | 46* | 181108 | 26362 | 22429 | 21643 | 19236 | 14818 | 12888 | 5068 | 2151 | 2271 | 9435 | 19932 | 24875 |
| Variole | Smallpox | 47* | 55537 | 6342 | 6653 | 7996 | 7961 | 6801 | 5397 | 2506 | 1454 | 1270 | 2207 | 3111 | 3839 |

* Y compris le district de Colombie. — Including the District of Columbia.
[1] Nombre d'Etats ayant envoyé des rapports relatifs aux maladies spécifiées pour l'année 1924. — Number of States from which reports on the diseases specified were received in 1924.
Ces données sont provisoires, car plusieurs Etats n'ont pas encore envoyé leurs rapports définitifs. — These data are provisional, as final reports have not been received from many of the States.

## ÉTATS-UNIS — UNITED STATES

(Population: 112 078 611. E. 1er juillet 1924.)

**Nombre de cas de certaines maladies transmissibles déclarés en 1921-1924.**
**Number of Cases of Certain Communicable Diseases reported in 1921-1924.**

*Source:* United States Public Health Reports.

| Maladie — Disease | | Nombre d'Etats notifiant Number of States reporting | Populat. (E. 1er juil. 1924) en milliers in thousands | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| Angine septique | Septic sore throat | 18 | 49254 | 4048 | 2575 | 1781 | 1920 |
| Anthrax | Anthrax | 29 | 77653 | 73 | 88 | 137 | 164 |
| Coqueluche | Whooping-cough | 39 | 87676 | * | 94791 | 144012 | 126406 |
| Dengue | Dengue | 16 | 35562 | 415 | 64253 | 2976 | 674 |
| Diphtérie | Diphtheria | 44 | 103755 | 205547 | 165285 | 140763 | 115290 |
| Fièvre des Montagnes rocheuses | Rocky Mountain spotted fever | 11 | 25858 | 65 | 159 | 90 | 96 |
| Fièvre typhoïde | Typhoid fever | 43 | 101287 | 46636 | 33826 | 32303 | 33244 |
| Grippe | Influenza | 25 | 62844 | 36344 | 274954 | 336953 | 69287 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | 36 | 90497 | 2070 | 1166 | 1747 | 1405 |
| Oreillons | Mumps | 31 | 73658 | * | 38757 | 44757 | 100330 |
| Paludisme | Malaria | 26 | 69305 | 189629 | 156962 | 138427 | 109521 |
| Pneumonie | Pneumonia | 8 | 33038 | 51036 | 70912 | 70965 | 61793 |
| Poliomyélite | Poliomyelitis | 41 | 94909 | 6243 | 2170 | 3184 | 5084 |
| Rougeole | Measles | 43 | 94655 | 239252 | 207939 | 629602 | 470670 |
| Scarlatine | Scarlet fever | 44 | 103755 | 187915 | 154696 | 169733 | 175319 |
| Tuberculose, tout. form. | Tuberculosis, all forms | 16 | 51046 | 92729 | 92161 | 89642 | 90296 |
| Tuberculose pulmonaire | Pulmonary tuberculosis | 5 | 23765 | 43754 | 45484 | 43689 | 42808 |
| Typhus exanthématique | Typhus fever | 36 | 94135 | 88 | 43 | 62 | 119 |
| Varicelle | Chickenpox | 43 | 95086 | * | 110980 | 132435 | 170995 |
| Variole | Smallpox | 44 | 103755 | 99030 | 31632 | 29795 | 54457 |
| Gonorrhée | Gonorrhœa | 46 | 109537 | 165613 | 153720 | 157710 | 161274 |
| Syphilis | Syphilis | 46 | 109537 | 174324 | 167087 | 183622 | 195723 |

| | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|
| Peste — Plague . . . . | 12 | 49 | 2 | 2 | 1 | 41 |

* Les données manquent. — Data not available.

## GRENADE — GRENADA

(Population: 68 086. E. 31 déc. 1923.)

**Nombre de cas de quelques maladies contagieuses et de décès causés par ces maladies déclarés en 1923 et 1924; par mois en 1924.**

**Number of Cases of and Deaths from Certain Communicable Diseases reported in 1923 and 1924; by months in 1924.**

*Sources:* Rapports du Ministère britannique de Santé, 1923-1924. — Reports from British Ministry of Health, 1923-1924. Medical Report on the Charitable Institutions, etc., 1922.

| Maladie — Disease | | | Total 1923 | Total 1924 | Jan. Jan. | Fév. Feb. | Mars Mar. | Avril April | Mai May | Juin June | Juil. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dysenterie [1] | Dysentery [1] | C. | 733 | 725 | 62 | 46 | 47 | 35 | 37 | 35 | 50 | 50 | 63 | 89 | 121 | 90 |
| Grippe | Influenza | C. | 628 | 207 | 2 | 23 | 25 | 0 | 2 | 12 | 18 | 18 | 28 | 20 | 25 | 34 |
| Pneumonie | Pneumonia | C. | 79 | 26 | 1 | 3 | 4 | 2 | 3 | 1 | 1 | 1 | 0 | 2 | 5 | 3 |
| | | D. | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Poliomyélite aiguë | Acute polio-myelitis | C. | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | D. | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

[1] La dysenterie a causé 99 décès en 1920; 109 décès en 1921; 83 décès en 1922. — Dysentery caused 99 deaths in 1920, 109 in 1921, 83 in 1922.

Autres maladies déclarées: — Other diseases notified:

| | Fièvre typhoïde Enteric fever | | Paludisme Malaria | Pellagre Pellagra | Tétanos Tetanus | Tuberculose pulmonaire Pulmonary tuberculosis | |
|---|---|---|---|---|---|---|---|
| | C. | D. | D. | D. | D. | C. | D. |
| 1919 . . . . . | — | — | — | 0 | — | 80 | 65 |
| 1920 . . . . . | 174 | 37 | 77 | 2 | 15 | 61 | 46 |
| 1921 . . . . . | 88 | 12 | 69 | 0 | 13 | 35 | 50 |
| 1922 . . . . . | 144 | 24 | 83 | 1 | 9 | 44 | 37 |

## GUYANE BRITANNIQUE — BRITISH GUIANA

(Population: 297 691. R. avril 1921.)

**Nombre de cas de maladies à déclaration obligatoire et de décès causés par ces maladies déclarés en 1919-1924; par périodes de quatre semaines en 1924.**

**Number of Cases of and Deaths from Notifiable Diseases reported in 1919-1924; by four-week periods in 1924.**

*Source:* Rapports du Ministère britannique de Santé. — Reports from British Ministry of Health.

| Période de quatre semaines finissant le: Four-week period ending: | | | | Dysenterie Dysentery | | Fièvre typhoïde Enteric fever | | Grippe Influenza | | Méningite cérébro-spin. Cerebro-spin. meningitis | | Pneumonie Pneumonia | | Varicelle Chicken-pox |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C.* |
| Total | | | 1919 | — | 385 | 525 | 112 | — | 3381 | — | 0 | — | — | — |
| » | | | 1920 | — | 246 | 795 | 138 | — | 163 | — | 0 | — | — | — |
| » | | | 1921 | — | 301 | 489 | 118 | — | 229 | — | 0 | — | — | 7 |
| » | | | 1922 | — | 300 | 461 | 92 | — | 105 | 2 | 0 | — | — | 68 |
| » | | | 1923 | 1111 | 89 | 384 | 63 | 8473 | 77 | 2 | 2 | 920 | 305 | 47 |
| » | | | 1924 | 907 | 80 | 320 | 56 | 1465 | 28 | 2 | 1 | 875 | 342 | 106 |
| Janvier | — | January | 26 | 123 | 10 | 21 | 3 | 247 | 0 | 0 | 0 | 83 | 23 | 0 |
| Février | — | February | 23 | 135 | 13 | 21 | 4 | 254 | 8 | 0 | 0 | 71 | 20 | 2 |
| Mars | — | March | 22 | 105 | 6 | 37 | 7 | 210 | 2 | 1 | 1 | 92 | 27 | 7 |
| Avril | — | April | 19 | 78 | 4 | 31 | 2 | 113 | 4 | 0 | 0 | 65 | 25 | 4 |
| Mai | — | May | 17 | 41 | 5 | 20 | 5 | 21 | 1 | 1 | 0 | 56 | 25 | 3 |
| Juin | — | June | 14 | 55 | 5 | 24 | 4 | 26 | 0 | 0 | 0 | 58 | 22 | 2 |
| Juillet | — | July | 12 | 57 | 6 | 31 | 6 | 38 | 0 | 0 | 0 | 48 | 15 | 3 |
| Août | — | August | 9 | 47 | 6 | 33 | 7 | 86 | 0 | 0 | 0 | 37 | 20 | 4 |
| Septembre | — | September | 6 | 48 | 9 | 27 | 5 | 75 | 4 | 0 | 0 | 65 | 24 | 49 |
| Octobre | — | October | 4 | 47 | 5 | 21 | 2 | 68 | 1 | 0 | 0 | 64 | 33 | 27 |
| Novembre | — | November | 1 | 45 | 0 | 14 | 8 | 86 | 3 | 0 | 0 | 61 | 30 | 5 |
| Novembre | — | November | 29 | 57 | 6 | 14 | 0 | 164 | 5 | 0 | 0 | 85 | 42 | 0 |
| Décembre | — | December | 27 | 69 | 5 | 26 | 3 | 77 | 0 | 0 | 0 | 90 | 36 | 0 |

Autres maladies déclarées. — Other diseases reported:

| | | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|
| Diphtérie — Diphtheria . . . | C. | 8 | 27 | 18 | 0 |
| Variole — Smallpox . . . . . | C. | 0 | 0 | 1 | 0 |

1 cas de variole en 1923. — 1 case of smallpox in 1923.

Pas de cas de choléra asiatique, de fièvre jaune, de peste ou de typhus exanthématique, 1919-1924. — No case of Asiatic cholera, yellow fever, plague or typhus, 1919-1924.

* 1 décès de varicelle en 1924. — 1 death from chickenpox in 1924.

## HAÏTI — HAITI

(Population : 1 631 260. R. novembre 1919.)

**Nombre de décès causés par certaines maladies contagieuses déclarés en 1924; par mois.**
**Number of Deaths from Certain Infectious Diseases reported in 1924; by months.**

*Source:* Rapports mensuels du Service national d'Hygiène publique — Monthly Reports from National Health Service.

| Cause de décès / Cause of death | | Total 1924 *a* | Janv. Jan. | Fév. Feb. | Mars Mar. | Avril April | Mai May | Juin June | Juill. July | Août Aug. |
|---|---|---|---|---|---|---|---|---|---|---|
| Béri-béri | Beri-beri | 3 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| Coqueluche | Whooping-cough | 12 | 3 | 1 | 1 | 2 | 0 | 0 | 3 | 2 |
| Dysenterie | Dysentery | 351 | 104 | 54 | 29 | 60 | 24 | 24 | 26 | 30 |
| Fièvre puerpérale | Puerperal fever | 11 | 1 | 2 | 0 | 0 | 2 | 1 | 3 | 2 |
| Fièvre (sans spécification) | Fever (unknown cause) | 1002 | 117 | 114 | 134 | 133 | 102 | 69 | 155 | 178 |
| Fièvre typhoïde | Enteric fever | 14 | 2 | 2 | 2 | 1 | 0 | 4 | 2 | 1 |
| Grippe | Influenza | 9 | 5 | 2 | 2 | 0 | 0 | 0 | 0 | 0 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| Paludisme | Malaria | 259 | 48 | 39 | 34 | 30 | 33 | 35 | 22 | 18 |
| Pneumonie et broncho-pneumonie | Pneumonia and broncho-pneumonia | 83 | 17 | 19 | 11 | 7 | 6 | 8 | 9 | 6 |
| Syphilis | Syphilis | 204 | 27 | 29 | 41 | 19 | 28 | 24 | 19 | 17 |
| Tuberculose | Tuberculosis | 441 | 68 | 60 | 99 | 52 | 29 | 47 | 41 | 45 |

*a* Total pour huit mois seulement. — Total for eight months only.

## LA HAVANE — HAVANA

(Population: 395 998. E. 31 déc. 1924.)

**Nombre de cas de maladies à déclaration obligatoire et de décès dus à ces maladies en 1919-1924.**
**Number of Cases of and Deaths from Notifiable Diseases in 1919-1924.**

*Sources:* Sanidad y Beneficiencia, Boletin Oficial, Edicion mensual. — Boletin Decenal Epidemiologico Sanitario.

| Maladie — Disease | | 1919 | | 1920 | | 1921 | | 1922 | | 1923 | | 1924 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | C | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. |
| Diphtérie | Diphtheria | 79 | 10 | 78 | 16 | 64 | 17 | 95 | 13 | 129 | 18 | 157 | 12 |
| Fièvre paratyphoïde | Paratyphoid fever | — | — | 0 | 0 | 8 | 1 | 40 | 6 | 19 | 2 | 21 | 2 |
| Fièvre typhoïde | Typhoid fever | 609 | 125 | 771 | 153 | 410 | 112 | 639 | 132 | 443 | 89 | 1082 | 202 |
| Lèpre | Leprosy | 3 | 3 | 2 | 0 | 4 | 1 | 5 | 3 | 15 | 2 | 4 | 2 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | 2 | 1 | 39 | 16 | 19 | 11 | 1 | 2 | 6 | 1 | 7 | 2 |
| Paludisme | Malaria | 1128 | 19 | 1142 | 20 | 1509 | 23 | 934 | 35 | 1176 | 29 | 678 | 16 |
| Peste | Plague | 0 | 0 | 0 | 0 | 0 | 0 | 1 *a* | 0 | 0 | 0 | 0 | 0 |
| Poliomyélite | Poliomyelitis | 0 | 0 | 0 | 0 | 3 | 1 | 1 | 0 | 1 | 1 | 0 | 0 |
| Rougeole | Measles | 82 | 1 | 885 | 46 | 147 | 4 | 11 | 1 | 81 | 0 | 173 | 2 |
| Scarlatine | Scarlet fever | 25 | 1 | 109 | 22 | 74 | 3 | 130 | 0 | 36 | 0 | 38 | 1 |
| Tétanos infantile | Infantile tetanus | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tuberculose pulmonaire | Pulmonary tuberculosis | 1542 | 1135 | 1317 | 1137 | 1042 | 1035 | 1393 | 1027 | 1360 | 882 | 1236 | 975 |
| Varicelle | Chickenpox | 17 | 0 | 142 | 0 | 122 | 1 | 217 | 1 | 165 | 0 | 334 | 0 |
| Variole | Smallpox | 55 | 2 | 15 | 1 | 47 | 0 | 34 | 1 | 0 | 0 | 0 | 0 |

5 cas de fièvre jaune en 1921. — 5 cases of yellow fever in 1921.
1 cas mortel d'encéphalite léthargique en 1921. — 1 fatal case of encephalitis lethargica in 1921
1 cas de morve en 1919. — 1 case of glanders in 1919.
1 cas mortel de rage en 1923. — 1 fatal case of rabies in 1923.

*a* Cas de peste bubonique importé en novembre 1922 par un vapeur en provenance de Barcelone, avec escale aux Canaries. Le malade s'est rétabli. — One case of bubonic plague imported in November 1922 by a steamer from Barcelona, with call at Canary Islands. The case recovered.

## HAWAÏ — HAWAII

(Population: 275 688. E. 31 déc. 1922.)

**Nombre de cas de maladies à déclaration obligatoire déclarés en 1920-1924; par mois en 1924.**
**Number of Cases of Notifiable Diseases reported in 1920-1924; by months in 1924.**

*Source:* «Public Health Reports» des Etats-Unis. — United States Public Health Reports.

| Maladie — Disease | | Total 1920 | Total 1921 | Total 1922 | Total 1923 | Total 1924 | Jan. Jan. | Fév. Feb. | Mars Mar. | Avril April | Mai May | Juin June | Juil. July | Août Aug. | Sept. Sept. | Oct. Oct | Nov. Nov. | Déc Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Diphtérie | Diphtheria | 125 | 186 | 235 | 186 | 223 | 11 | 28 | 19 | 23 | 20 | 1 | 30 | 12 | 14 | 20 | 9 | 27 |
| Fièvre typhoïde | Enteric fever | 178 | 230 | 183 | 176 | 119 | 11 | 12 | 7 | 18 | 17 | 11 | 9 | 6 | 7 | 4 | 5 | 12 |
| Grippe | Influenza | 17843 | 786 | 788 | 2455 | 471 | 91 | 147 | 21 | 36 | 20 | 16 | 13 | 22 | 22 | 18 | 8 | 57 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | *a* 5 | 21 | 17 | 13 | 53 | 23 | 12 | 4 | 1 | 2 | 0 | 3 | 2 | 0 | 2 | 4 | 0 |
| Paludisme | Malaria | — | — | — | — | 8 | 0 | 0 | 0 | 0 | " | 5 | 0 | 1 | 1 | 0 | 1 | 0 |
| Poliomyélite | Poliomyelitis | — | 3 | *a* 1 | 10 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rougeole | Measles | 631 | 358 | 1388 | 1145 | 182 | 15 | 10 | 9 | 9 | 32 | 35 | 28 | 14 | 4 | 6 | 12 | 8 |
| Scarlatine | Scarlet fever | 17 | 21 | 32 | 21 | 14 | 3 | 1 | 2 | 0 | 4 | 2 | 0 | 0 | 0 | 0 | 1 | 1 |
| Tuberculose toutes formes | Tuberculosis all forms | 1029 | 955 | 901 | 990 | 1027 | 88 | 76 | 100 | 82 | 94 | 121 | 89 | 80 | 67 | 72 | 81 | 77 |
| Variole | Smallpox | — | 4 | 2 | 1 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Autres maladies déclarées: — Other diseases reported:

| Année Year | Conjonctivit. folliculaire Follicular conjunctiv. | Coqueluche Whooping-cough | Dengue Dengue | Dysenterie Dysentery | Lèpre Leprosy | Peste [1] Plague [1] | Tétanos Tetanus | Trachome Trachoma | Tuberculose pulmonaire Pulmonary Tuberculosis | Varicelle Chickenpox |
|---|---|---|---|---|---|---|---|---|---|---|
| 1920 . . . . . | — | — | *a* 1 | — | — | 1 | — | — | 965 | — |
| 1921 . . . . . | — | — | 1 | — | — | 3 | — | — | 869 | — |
| 1922 . . . . . | — | 340 | — | — | — | 6 | — | — | 778 | 128 |
| 1923 . . . . . | 47 | 594 | 1 | 10 | 64 | 1 | 24 | 397 | — | 114 |
| 1924 . . . . . | — | 291 | — | — | — | — | — | — | 903 | 283 |

*a* Décès; le nombre des cas n'est pas donné. — Deaths; number of cases not reported.

[1] Les décès signalés sont: 1919, 5 décès; 1920, 2 décès; 1921, 2 décès; 1922, 12 décès; 1923, 1 décès. — Deaths reported were as follows: 1919, 5; 1920, 2; 1921, 2; 1922, 12; 1923, 1.

## MEXIQUE — MEXICO

(Population: 13 887 080. R. 1921.)

**Décès causés par certaines maladies en 1924; par mois.**
**Deaths from Certain Diseases in 1924; by months.**

*Source:* Rapports du Département de la Santé publique. — Reports from Public Health Department.

| Cause de décès Cause of death | | Total 1924 | Janv. Jan. | Févr. Feb. | Mars March | Avril April | Mai May | Juin June | Juil. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Coqueluche | Whooping-cough | 2430 | 115 | 211 | 275 | 320 | 226 | 201 | 216 | 139 | 159 | 217 | 191 | 160 |
| Diphtérie | Diphtheria | 202 | 11 | 16 | 14 | 24 | 13 | 6 | 21 | 13 | 26 | 19 | 18 | 21 |
| Dysenterie | Dysentery | 1917 | 38 | 44 | 56 | 115 | 120 | 133 | 320 | 353 | 267 | 191 | 169 | 111 |
| Erysipèle | Erysipelas | 379 | 18 | 26 | 22 | 40 | 31 | 15 | 39 | 33 | 38 | 36 | 36 | 45 |
| Fièvre typhoïde | Typhoid fever | 1108 | 46 | 69 | 69 | 162 | 150 | 50 | 77 | 86 | 96 | 143 | 63 | 97 |
| Grippe | Influenza | 1053 | 9 | 81 | 266 | 394 | 188 | 18 | 22 | 5 | 14 | 11 | 20 | 25 |
| Infection puerpérale | Puerperal infection | 251 [1] | 15 | 20 | 27 | 27 | 24 | 24 | — | 22 | 25 | 19 | 22 | 26 |
| Lèpre | Leprosy | 78 | 1 | 3 | 3 | 3 | 11 | 3 | 8 | 3 | 7 | 11 | 19 | 6 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Paludisme | Malaria | 1174 | 25 | 65 | 78 | 100 | 107 | 60 | 130 | 88 | 131 | 144 | 128 | 118 |
| Rage humaine | Rabies | 12 | 0 | 0 | 2 | 2 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 4 |
| Rougeole | Measles | 1217 | 12 | 40 | 97 | 189 | 125 | 150 | 193 | 148 | 85 | 99 | 42 | 37 |
| Scarlatine | Scarlet fever | 53 | 2 | 2 | 1 | 6 | 6 | 3 | 8 | 0 | 4 | 14 | 6 | 1 |
| Tétanos | Tetanus | 234 | 23 | 7 | 13 | 18 | 0 | 22 | 30 | 30 | 35 | 20 | 21 | 15 |
| Tuberculose, toutes formes | Tuberculosis, all forms | 2426 | 108 | 244 | 245 | 278 | 247 | 194 | 213 | 180 | 189 | 198 | 162 | 168 |
| Typhus exanthématique | Typhus | 153 | 9 | 7 | 13 | 40 | 27 | 6 | 9 | 11 | 5 | 8 | 10 | 8 |
| Variole | Smallpox | 2702 | 53 | 153 | 163 | 237 | 317 | 295 | 361 | 271 | 261 | 163 | 218 | 210 |

[1] Total pour onze mois seulement, pas de renseignements pour juillet. — Total for eleven months only; no data received for July.

## ZONE DU CANAL DU PANAMA ET VILLES DE PANAMA ET DE COLON
## PANAMA CANAL ZONE, CITIES OF PANAMA AND COLON

(Population: 124 643. E. 31 déc. 1924.)

**Nombre de cas de maladies à déclaration obligatoire déclarés en 1921-1924; par mois en 1924.**
**Number of Cases of Notifiable Diseases reported in 1921-1924; by months in 1924.**

*Source:* Rapports mensuels du Médecin-chef du Service sanitaire.— Monthly Reports from Chief Health Officer.

| Maladie — Disease | | Total 1921 | Total 1922 | Total 1923 | Total 1924 | Jan. Jan. | Fév. Feb. | Mars Mar. | Avril April | Mai May | Juin June | Juil. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Angine de Vincent | Vincent's Angina | 3 | 0 | 3 | 12 | 1 | 9 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 |
| Ankylostomiase | Ankylostomiasis | 13 | 584 | 624 | 1148 | 111 | 65 | 166 | 72 | 80 | 118 | 202 | 5 | 76 | 71 | 111 | 71 |
| Coqueluche | Whooping-cough | 271 | 15 | 73 | 191 | 9 | 16 | 29 | 50 | 14 | 27 | 3 | 4 | 10 | 15 | 7 | 7 |
| Dengue | Dengue | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diphtérie | Diphtheria | 136 | 174 | 99 | 67 | 1 | 9 | 1 | 5 | 6 | 10 | 11 | 7 | 9 | 5 | 2 | 1 |
| Dysenterie | Dysentery | 26 | 55 | 66 | 70 | 9 | 8 | 3 | 7 | 10 | 5 | 1 | 10 | 1 | 5 | 8 | 3 |
| Erysipèle | Erysipelas | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fièvre récurrente | Relaps. fever | 7 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fièvre typhoïde | Enteric fever | 36 | 31 | 24 | 19 | 2 | 2 | 1 | 0 | 4 | 1 | 2 | 3 | 1 | 1 | 1 | 1 |
| Lèpre | Leprosy | 11 | 10 | 9 | 21 | 0 | 3 | 3 | 2 | 3 | 3 | 0 | 0 | 0 | 1 | 4 | 2 |
| Méningite | Meningitis | 5 | 15 | 12 | 16 | 0 | 4 | 4 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 3 | 0 |
| Oreillons | Mumps | 374 | 27 | 21 | 93 | 0 | 4 | 11 | 2 | 2 | 5 | 36 | 14 | 5 | 10 | 2 | 2 |
| Paludisme | Malaria | 1464 | 1552 | 1606 | 1568 | 181 | 105 | 85 | 67 | 137 | 256 | 201 | 165 | 93 | 85 | 94 | 99 |
| Pian | Yaws | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 |
| Pneumonie | Pneumonia | 223 | 180 | 240 | 351 | 42 | 37 | 38 | 27 | 26 | 28 | 32 | 18 | 13 | 16 | 37 | 37 |
| Poliomyélite | Poliomyelitis | 3 | 3 | 0 | 12 | 1 | 1 | 2 | 2 | 1 | 1 | 0 | 1 | 2 | 1 | 0 | 0 |
| Rougeole | Measles | 228 | 79 | 353 | 449 | 60 | 83 | 57 | 52 | 48 | 45 | 26 | 23 | 19 | 14 | 11 | 11 |
| Scarlatine | Scarlet fever | 58 | 24 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 1 | 0 |
| Trachome | Trachoma | 1 | 1 | 3 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 |
| Trichinose | Trichinosis | — | — | — | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Tuberculose | Tuberculosis | 294 | 257 | 376 | 396 | 23 | 38 | 31 | 36 | 52 | 35 | 27 | 36 | 25 | 25 | 33 | 35 |
| Varicelle | Chickenpox | 136 | 159 | 245 | 170 | 11 | 14 | 16 | 12 | 18 | 11 | 10 | 12 | 12 | 13 | 22 | 19 |
| Variole | Smallpox | 215 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Nombre de décès dus à quelques maladies déclarés dans la zone du Canal de Panama et dans les villes de Panama et de Colon en 1919-1924.**
**Deaths from Certain Causes reported in the Panama Canal Zone and the Cities of Panama and Colon in 1919-1924.**

*Source:* Report of the Health Department of the Panama Canal, 1919, 1920, 1921, 1922, 1923, 1924.

| Cause de décès — Cause of death | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | Cause de décès. — Cause of death | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Béri-béri | Beri-beri | 2 | 1 | 2 | 2 | 2 | 1 | Paludisme | Malaria | 18 | 9 | 19 | 18 | 19 | 25 |
| Coqueluche | Whooping-cough | 9 | 2 | 2 | 1 | 1 | 3 | Pellagre | Pellagra | 11 | 7 | 14 | 18 | 10 | 16 |
| Diphtérie | Diphtheria | 10 | 7 | 6 | 9 | 2 | 7 | Poliomyélite | Poliomyelitis | 0 | 0 | 1 | 0 | 0 | 0 |
| Dysenterie | Dysentery | 13 | 10 | 17 | 13 | 8 | 18 | Pneumonie * | Pneumonia * | 260 | 216 | 275 | 212 | 250 | 312 |
| Fièvre typhoïde | Enteric fever | 5 | 6 | 6 | 5 | 1 | 2 | Rougeole | Measles | 1 | 1 | 3 | 0 | 3 | 9 |
| Grippe | Influenza | 4 | 62 | 20 | 3 | 1 | 3 | Scarlatine | Scarlet fever | 0 | 1 | 2 | 0 | 0 | 0 |
| Lèpre | Leprosy | 2 | 6 | 0 | 5 | 2 | 1 | Tétanos | Tetanus | 2 | 3 | 5 | 4 | 5 | 2 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | 1 | 5 | 0 | 2 | 0 | 1 | Tuberculose, toutes formes | Tuberculosis, all forms | 364 | 343 | 308 | 329 | 282 | 307 |
| | | | | | | | | Variole | Smallpox | 0 | 0 | 2 | 0 | 0 | 0 |

* Comprend la broncho-pneumonie, la pneumonie non spécifiée et la pneumonie lobaire. — Including broncho-pneumonia, pneumonia unqualified and lobar-pneumonia.

## PÉROU — PERU

(Population: 4 607 000. R. 1896.)

**Nombre de décès causés par certaines maladies transmissibles déclarés à Lima et à Callao, 1923 - 30 juin 1924.**
**Number of Deaths from Certain Communicable Diseases reported in Lima and in Callao, 1923 - June 30th, 1924.**

*Source:* Rapport du Département de la Santé publique. — Report from Public Health Department.

| Cause de décès | Lima (Population: 186 657) | | Callao (Population: 58 452) | | Cause of Death |
|---|---|---|---|---|---|
| | 1923 | 1924 | 1923 | 1924 | |
| Coqueluche | 66 | 54 | 26 | 10 | Whooping-cough |
| Diphtérie | 15 | 6 | 2 | 2 | Diphtheria |
| Fièvre typhoïde | 71 | 43 | 19 | 8 | Enteric fever |
| Grippe | 125 | 57 | 43 | 21 | Influenza |
| Paludisme | 97 | 68 | 26 | 21 | Malaria |
| Peste | 63 | 46 | 9 | 15 | Plague |
| Rougeole | 7 | 48 | 0 | 2 | Measles |
| Scarlatine | 0 | 0 | 0 | 0 | Scarlet fever |
| Septicémie puerpérale | 29 | 24 | 5 | 9 | Puerperal septicæmia |
| Tuberculose des voies respirat. | 802 | 779 | 329 | 317 | Tuberculosis of respiratory organs |
| Tuberculose autres formes | 142 | 116 | 54 | 48 | Tuberculosis, other forms |
| Typhus exanthématique | 0 | 0 | 0 | 0 | Typhus |
| Variole | 5 | 0 | 0 | 0 | Smallpox |
| Entérite, au-dessous d'un an | 491 | 494 | 149 | 150 | Enteritis, under 1 year |
| » 1 à 2 ans | 147 | 120 | 51 | 35 | » 1 to 2 years |
| Autres causes | 2797 | 2743 | 899 | 880 | Other causes |
| Total | 4857 | 4603 | 1612 | 1518 | Total |

**Nombre de cas et de décès dus à la peste constatés au Pérou, 1919-1924; par mois en 1924.**
**Number of Cases of and Deaths from Plague reported in Peru, 1919-1924; by months in 1924.**

| | Total 1919 | Total 1920 | Total 1921 | Total 1922 | Total 1923 | Total 1924 | Jan. Jan. | Fév. Feb. | Mars March | Avril April | Mai May | Juin June | Juillet July | Aout Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Peste Plague | | | | | | | | | | | | | | | | | | |
| Cas Cases | 654 | 758 | 870 | 804 | 880 | 418 | 71 | 65 | 72 | 73 | 24 | 27 | 11 | 6 | 3 | 27 | 11 | 28 |
| Décès Deaths | 340 | 392 | 505 | 372 | 414 | 182 | 34 | 22 | 29 | 24 | 19 | 11 | 6 | 5 | 1 | 13 | 5 | 13 |

## PORTO-RICO

(Population: 1 355 986. E. 31 déc. 1922.)

**Nombre de cas de certaines maladies contagieuses déclarés en 1920-1924: par mois en 1924.**
**Number of Cases of Certain Communicable Diseases reported in 1920-1924: by months in 1924.**

*Source:* Public Health Reports des Etats-Unis. — United States Public Health Reports.

| | | Total 1920 | Total 1921 | Total 1922 | Total 1923 | Total 1924 | Jan. Jan. | Fév. Feb. | Mars Mar. | Avril April | Mai May | Juin June | Juil. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Anthrax | Anthrax | — | — | — | — | 5 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Coqueluche | Whoop.-cough | — | — | — | 92 | 390 | 0 | 0 | 2 | 15 | 1 | 32 | 6 | 7 | 12 | 246 | 44 | 25 |
| Diphtérie | Diphtheria | 149 | 99 | 116 | 262 | 472 | 29 | 65 | 101 | 45 | 28 | 30 | 28 | 34 | 21 | 17 | 43 | 31 |
| Fièvre typh. | Typh. fever | 225 | 429 | 301 | 870 | 810 | 90 | 56 | 45 | 40 | 57 | 69 | 51 | 74 | 124 | 96 | 48 | 60 |
| Grippe | Influenza | 6396 | 634 | — | 10480 | 128 | 0 | 0 | 0 | 0 | 0 | 12 | 1 | 0 | 0 | 0 | 0 | 115 |
| Méningite cérébro-sp. | Cerebro-spinal meningit. | — | — | — | — | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| Oreillons | Mumps | — | — | — | — | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Paludisme | Malaria | 3077 | 1289 | — | 515 | 1205 | 260 | 44 | 19 | 45 | 17 | 86 | 68 | 38 | 103 | 173 | 211 | 141 |
| Pneumonie, toutes formes | Pneumonia, all forms | — | — | — | — | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| Rougeole | Measles | 417 | 1296 | — | 57 | 188 | 0 | 0 | 1 | 1 | 0 | 8 | 6 | 2 | 9 | 30 | 61 | 70 |
| Tuberculose, toutes formes | Tuberculosis, all forms | — | — | — | — | 1670 | 139 | 127 | 137 | 137 | 128 | 190 | 101 | 143 | 105 | 53 | 200 | 210 |
| Varicelle | Chickenpox | — | — | 69 | 97 | 71 | 27 | 14 | 4 | 13 | 4 | 3 | 1 | 1 | 1 | 0 | 0 | 3 |
| Variole | Smallpox | 2* | 1 | 6 | 0 | 0 | | | | | | | | | | | | |

* Décès, le nombre des cas n'est pas donné. — Deaths; number of cases not reported.

## RÉPUBLIQUE ARGENTINE — ARGENTINE REPUBLIC

VILLE DE BUENOS-AIRES (CITY)

(Population: 1 817 947. E. 31 août 1924.)

**Nombre de décès causés par certaines maladies contagieuses déclarés en 1923 et 1924; par mois en 1924.**
**Number of Deaths from Certain Communicable Diseases reported in 1923 and 1924; by months in 1924.**

*Source:* Boletin Mensual de Estadistica Municipal.

| Maladie — Disease | | Total 1923 | Total 1924 | Janv. Jan. | Fév. Feb. | Mars March | Avril April | Mai May | Juin June | Juil. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Diphtérie | Diphtheria | 129 | 142 | 12 | 10 | 9 | 13 | 4 | 11 | 12 | 19 | 12 | 17 | 13 | 10 |
| Encéphalite létharg. | Encephalitis letha. | — | 5 | 1 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| Fièvre typhoïde | Enteric fever | 142 | 96 | 9 | 15 | 11 | 14 | 14 | 5 | 2 | 8 | 1 | 4 | 8 | 5 |
| Grippe | Influenza | 268 | 280 | 6 | 2 | 6 | 10 | 19 | 22 | 18 | 43 | 69 | 42 | 28 | 15 |
| Lèpre | Leprosy | 28 | 26 | 1 | 0 | 2 | 5 | 3 | 0 | 3 | 0 | 1 | 2 | 5 | 4 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | 7 | 5 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| Pneumonie | Pneumonia | 2239 | 2185 | 110 | 76 | 76 | 101 | 119 | 148 | 206 | 312 | 382 | 244 | 213 | 198 |
| Peste | Plague | 3 | | | | | | | | | | | | | |
| Scarlatine | Scarlet fever | 23 | 26 | 1 | 3 | 2 | 0 | 1 | 0 | 2 | 1 | 2 | 3 | 6 | 5 |
| Tuberculose des voies respiratoires | Tuberculosis of the respitatory organs | 2888 | 3253 | 235 | 236 | 260 | 226 | 254 | 242 | 226 | 318 | 316 | 304 | 306 | 330 |
| Tuberculose autres formes | Tuberculosis, other forms | 715 | 462 | 35 | 33 | 33 | 35 | 37 | 40 | 40 | 31 | 38 | 37 | 50 | 53 |
| Variole | Smallpox | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## RÉPUBLIQUE DOMINICAINE — DOMINICAN REPUBLIC

(Population : 897 405. R. 1921.)

**Nombre de cas de maladies à déclaration obligatoire et de décès causés par ces maladies, déclarés en 1924; par mois.**
**Number of Cases of and Deaths from Notifiable Diseases reported in 1924; by months.**

*Source* : Informe semanal sobre enfermedades trasmisibles y declarables.

| Maladie — Disease | | | Total 1924 | Janv. Jan. | Fév. Feb. | Mars Mar. | Avril April | Mai May | Juin June | Juil. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Buba | Buba | C. | 381 | 0 | 3 | 11 | 3 | 52 | 104 | 34 | 29 | 4 | 22 | 74 | 45 |
| | | D. | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Cholera nostras | Cholera nostras | C. | 135 | 11 | 16 | 10 | 8 | 11 | 11 | 6 | 0 | 12 | 30 | 9 | 11 |
| | | D. | 57 | 5 | 5 | 6 | 3 | 2 | 6 | 9 | 0 | 4 | 7 | 0 | 10 |
| Coqueluche | Whooping-cough | C. | 50 | 0 | 4 | 0 | 0 | 1 | 2 | 2 | 13 | 5 | 9 | 13 | 1 |
| | | D. | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| Diphtérie | Diphtheria | C. | 26 | 0 | 1 | 0 | 3 | 0 | 2 | 1 | 2 | 4 | 9 | 2 | 2 |
| | | D. | 13 | 0 | 0 | 0 | 3 | 0 | 0 | 1 | 2 | 5 | 2 | 0 | 0 |
| Dysenterie | Dysentery | C. | 897 | 109 | 98 | 67 | 35 | 46 | 35 | 25 | 48 | 53 | 78 | 143 | 160 |
| | | D. | 385 | 84 | 56 | 28 | 17 | 14 | 19 | 11 | 10 | 25 | 26 | 53 | 42 |
| Fièvre puerpérale | Puerperal fever | C. | 22 | 5 | 3 | 1 | 0 | 3 | 2 | 3 | 0 | 0 | 2 | 2 | 1 |
| | | D. | 7 | 1 | 2 | 0 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 |
| Fièvre paratyphoïde | Paratyphoid fever | C. | 80 | 5 | 2 | 6 | 8 | 6 | 4 | 2 | 15 | 1 | 8 | 11 | 12 |
| | | D. | 32 | 2 | 1 | 3 | 1 | 3 | 2 | 0 | 3 | 0 | 8 | 9 | 0 |
| Fièvre typhoïde | Typhoid fever | C. | 279 | 10 | 9 | 17 | 35 | 21 | 11 | 23 | 46 | 24 | 30 | 40 | 13 |
| | | D. | 199 | 14 | 7 | 14 | 12 | 19 | 15 | 18 | 16 | 20 | 15 | 26 | 23 |
| Grippe | Influenza | C. | 729 | 61 | 45 | 24 | 21 | 18 | 9 | 9 | 31 | 71 | 103 | 272 | 65 |
| | | D. | 4 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | C. | 2 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | D. | 3 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Paludisme | Malaria | C. | 4144 | 336 | 283 | 222 | 193 | 228 | 195 | 218 | 314 | 256 | 350 | 953 | 596 |
| | | D. | 220 | 25 | 21 | 23 | 21 | 33 | 24 | 20 | 14 | 11 | 13 | 9 | 6 |
| Pneumonie | Pneumonia | C. | 187 | 17 | 27 | 21 | 10 | 11 | 9 | 15 | 26 | 14 | 17 | 13 | 7 |
| | | D. | 125 | 8 | 12 | 7 | 7 | 9 | 13 | 14 | 11 | 15 | 14 | 9 | 6 |
| Rougeole | Measles | C. | 114 | 6 | 27 | 8 | 15 | 41 | 9 | 0 | 1 | 2 | 1 | 4 | 0 |
| | | D. | 5 | 0 | 1 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Trachome | Trachoma | C. | 7 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 2 | 0 | 0 |
| Tuberculose pulmonaire | Pulmonary tuberculosis | D. | 301 | 33 | 16 | 15 | 24 | 30 | 21 | 21 | 28 | 15 | 32 | 31 | 35 |
| Tuberculose, autres formes | Tuberculosis, other forms | D. | 44 | 2 | 6 | 5 | 6 | 6 | 1 | 3 | 1 | 2 | 10 | 1 | 1 |
| Varicelle | Chickenpox | C. | 75 | 17 | 7 | 16 | 8 | 7 | 3 | 1 | 4 | 1 | 6 | 3 | 2 |
| | | D. | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Chancre mou | Soft chancre | C. | 40 | 0 | 5 | 4 | 4 | 8 | 1 | 2 | 3 | 5 | 6 | 0 | 2 |
| Gonorrhée | Gonorrhœa | C. | 239 | 16 | 24 | 10 | 17 | 19 | 22 | 9 | 21 | 19 | 36 | 30 | 16 |
| Syphilis | Syphilis | C. | 117 | 15 | 6 | 5 | 11 | 4 | 15 | 4 | 7 | 11 | 9 | 8 | 22 |
| | | D. | 28 | 1 | 3 | 3 | 3 | 1 | 3 | 3 | 1 | 0 | 4 | 2 | 4 |

Autres maladies déclarées. — Other diseases notified:

| | Anthrax | | Béri-béri | | Dengue | Fièvre jaune | Fièvre méditerranéenne | | Lèpre | | Parotidite | | Poliomyélite | Rubéole German measles | Scarlatine | Variole |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Anthrax | | Beri-beri | | Dengue | Yellow fever | Malta fever | | Leprosy | | Parotitis | | Poliomyelitis | | Scarlet fever | Smallpox |
| | C. | D. | C. | D. | C. | C. | C. | D. | C. | D. | C. | D. | D. | C. | C. | C. |
| 1924 . . . | 2 | 1 | 1 | 1 | 75 | 2 | 2 | 1 | 1 | 2 | 7 | 1 | 4 | 6 | 1 | 2 |

## Ste. LUCIE — St. LUCIA (Population: 53 847. E. 1923.)

**Nombre de cas de quelques maladies déclarés en 1922-1924; par mois en 1924.**
**Number of Cases of Certain Diseases reported in 1922-1924; by months in 1924.**

*Sources:* Rapports périodiques du Ministère britannique de Santé. — Current Reports from British Ministry of Health. Annual Report of the Chief Medical Officer, 1922.

| Maladie — Disease | | Total 1922 | Total 1923 | Total 1924 | Janv. Jan. | Fév. Feb. | Mars March | Avril April | Mai May | Juin June | Juil. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dysenterie | Dysentery | 20 | 36 | 48 | 8 | 5 | 2 | 7 | 3 | 4 | 9 | 4 | 5 | 1 | 0 | 0 |
| Grippe | Influenza | — | 41 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pneumonie | Pneumonia | 52 | 142 | 151 | 12 | 19 | 39 | 9 | 7 | 4 | 8 | 7 | 11 | 15 | 10 | 10 |

Autres maladies déclarées: — Other diseases declared:

| | Alastrim | Tuberculose Tuberculosis | Varicelle Chickenpox | Variole Smallpox |
|---|---|---|---|---|
| 1922 | 1 | 115 | 5 | 1 |
| 1923 | 18 | 83 | 57 | 0 |

Pas de cas de choléra asiatique ou de peste, 1921-1924. — No case of Asiatic cholera or plague, 1921-1924.

## St. VINCENT (Population: 44 925. R. avril 1921.)

**Nombre de cas de certaines maladies et de décès causés par ces maladies déclarés en 1921-1924; par mois en 1924.**
**Number of Cases of and Deaths from Certain Diseases reported in 1921-1924; by months in 1924.**

*Source:* Rapports du Ministère britannique de Santé. — Reports from the British Ministry of Health.

| Maladie — Disease | | | Total 1921 | Total 1922 | Total 1923 | Total 1924 | Janv. Jan. | Fév. Feb. | Mars March | Avril April | Mai May | Juin June | Juillet July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dysenterie | Dysentery | C. | 419 | 447 | 461 | 189 | 11 | 8 | 14 | 10 | 22 | 12 | 73 | 10 | 7 | 0 | 13 | 9 |
| | | D. | 37 | 29 | 13 | 13 | 0 | 2 | 1 | 2 | 0 | 1 | 1 | 3 | 1 | 0 | 0 | 2 |
| Grippe | Influenza | C. | — | *1437 | *2124 | 2034 | 268 | 285 | 361 | 226 | 165 | 84 | 64 | 49 | 75 | 150 | 127 | 180 |
| | | D. | — | * 37 | * 55 | 18 | 2 | 1 | 3 | 3 | 1 | 1 | 2 | 0 | 2 | 2 | 0 | 1 |
| Pneumonie | Pneumonia | C. | — | — | 124 | 145 | 31 | 26 | 18 | 8 | 12 | 6 | 11 | 5 | 9 | 6 | 9 | 4 |
| | | D. | — | — | 15 | 16 | 4 | 1 | 3 | 1 | 3 | 0 | 0 | 0 | 0 | 1 | 2 | 1 |

Pas de cas de choléra asiatique, de fièvre jaune, de peste ou de variole, 1921-1924. — No case of Asiatic cholera, yellow fever, plague or smallpox, 1921-1924
* Pneumonie grippale comprise. — Influenzal pneumonia included.

## LA TRINITÉ ET TOBAGO — TRINIDAD AND TOBAGO

(Population: 362 780. R. 24 avril 1921.)

**Nombre de cas de certaines maladies contagieuses et de décès causés par ces maladies déclarés en 1921-1924; par mois en 1924.**
**Number of Cases of and Deaths from Certain Contagious Diseases reported in 1921-1924; by months in 1924.**

*Sources:* Rapports annuels de l'Inspecteur médical d'hygiène ; Rapports du Ministère britannique de Santé. — Annual Administration Reports of the Medical Inspector of Health ; Reports from the British Ministry of Health.

| Maladie — Disease | | | Total 1921 | Total 1922 | Total 1923 | Total 1924 | Jan. Jan. | Fév. Feb. | Mars Mar. | Avril April | Mai May | Juin June | Juil. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dysenterie | Dysentery | C. | 388 | 638 | 654 | 473 | 23 | 42 | 27 | 20 | 18 | 29 | 141 | 58 | 38 | 23 | 37 | 17 |
| | | D. | 222 | 219 | 197 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Grippe | Influenza | C. | 2536 | 905 | 2086 | 179 | 4 | 14 | 31 | 22 | 7 | 41 | 2 | 0 | 3 | 2 | 42 | 11 |
| | | D. | 214 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Pneumonie | Pneumonia | C. | 759 | 888 | 549 | 187 | 22 | 13 | 29 | 17 | 8 | 10 | 17 | 16 | 13 | 12 | 17 | 13 |
| | | D. | 470 | 456 | 308 | — | — | — | — | — | — | — | — | — | — | — | — | — |

Autres maladies déclarées: — Other diseases reported:

| Année Year | Diphtérie Diphtheria | Fièvre typhoïde Enteric fever | | Varicelle Chickenpox |
|---|---|---|---|---|
| | C. | C. | D. | C. |
| 1921 . . . . . | 26 | 820 | 240 | 16 |
| 1922 . . . . . | 17 | 732 | 199 | 92 |
| 1923 . . . . . | 22 | 648 | 143 | 54 |

Pas de cas de choléra asiatique, de fièvre jaune, de peste ou de variole, 1921-1924. — No case of Asiatic cholera, yellow fever, plague or smallpox, 1921-1924.

## URUGUAY

(Population: 1 603 000. E. 31 déc. 1923.)

**Nombre de cas de maladies à déclaration obligatoire et de décès causés par ces maladies en 1920-1924; par mois en 1924.**
**Number of Cases of and Deaths from Notifiable Diseases in 1920-1924; by months in 1924.**

*Sources:* Boletín del Consejo Nacional de Higiene, Montevideo. — Resumen Anual de Estadística Municipal, Montevideo. Morboridad y mortalidar infecto-contagiosa de la Republica O. del Uruguay, 1918-1919-1920-1921.

| Maladie — Disease | | | Total 1920 | Total 1921 | Total 1922 | Total 1923 | Total 1924 | Jan. Jan. | Fév. Feb. | Mars Mar. | Avril April | Mai May | Juin June | Juil. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Anthrax | Anthrax | C. | 163 | 119 | 110 | 48 | 103 | 20 | 24 | 7 | 11 | 6 | 5 | 4 | 4 | 5 | 5 | 5 | 7 |
| | | D. | 37 | 32 | 29 | 28 | 20 | 2 | 2 | 0 | 3 | 0 | 1 | 3 | 1 | 0 | 1 | 4 | 3 |
| Béri-béri | Beri-beri | C. | — | — | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | D. | — | — | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Coqueluche | Whooping-cough | C. | 584 | 445 | 173 | 48 | 390 | 20 | 14 | 11 | 7 | 8 | 29 | 56 | 85 | 47 | 46 | 41 | 26 |
| | | D. | 71 | 43 | 54 | 42 | 48 | 3 | 10 | 0 | 0 | 2 | 1 | 1 | 3 | 11 | 6 | 6 | 5 |
| Diphtérie | Diphtheria | C. | 1280 | 1137 | 627 | 339 | 400 | 33 | 32 | 39 | 44 | 52 | 39 | 45 | 28 | 20 | 35 | 15 | 18 |
| | | D. | 154 | 167 | 79 | 62 | 38 | 4 | 3 | 0 | 4 | 2 | 5 | 7 | 1 | 1 | 8 | 2 | 1 |
| Encéphalite léth. | Encephal. leth. | C. | 69 | 5 | 0 | 0 | 9 | 1 | 0 | 0 | 1 | 0 | 2 | 1 | 1 | 1 | 1 | 1 | 0 |
| | | D. | 53 | 9 | 11 | 3 | 14 | 0 | 0 | 1 | 2 | 0 | 8 | 1 | 1 | 0 | 0 | 1 | 0 |
| Erysipèle | Erysipelas | C. | 15 | 31 | 16 | 9 | 22 | 0 | 0 | 0 | 2 | 0 | 1 | 5 | 5 | 4 | 1 | 3 | 1 |
| | | D. | 12 | 18 | 19 | 10 | 13 | 3 | 1 | 0 | 1 | 0 | 0 | 2 | 2 | 3 | 1 | 0 | 0 |
| Fièvre typhoïde | Enteric fever | C. | 666 | 816 | 636 | 610 | 445 | 75 | 67 | 92 | 65 | 49 | 32 | 7 | 6 | 4 | 7 | 6 | 35 |
| | | D. | 242 | 284 | 234 | 258 | 127 | 18 | 17 | 25 | 24 | 12 | 5 | 5 | 1 | 2 | 2 | 7 | 9 |
| Grippe | Influenza | C. | 44 | 43 | 64 | 37 | 455 | 0 | 0 | 0 | 1 | 1 | 0 | 267 | 140 | 20 | 5 | 4 | 17 |
| | | D. | 29 | 185 | 91 | 223 | 55 | 0 | 0 | 1 | 0 | 0 | 0 | 3 | 13 | 16 | 8 | 7 | 7 |
| Lèpre | Leprosy | C. | 1 | 1 | 2 | 3 | 7 | 0 | 2 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 |
| | | D. | 7 | 6 | 8 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Méningite cérébro-spin. | Cerebro-spinal meningitis | C. | 9 | 8 | 11 | 6 | 6 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 0 | 0 |
| | | D. | 16 | 6 | 6 | 9 | 12 | 2 | 0 | 1 | 0 | 2 | 0 | 1 | 0 | 1 | 4 | 0 | 1 |
| Peste | Plague | C. | 3 | 2 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | D. | 3 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Poliomyélite | Poliomyelitis | C. | 29 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | D. | 1 | 4 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Purpure hémorragique | Hæmorrhagicæ purpura | C. | 3 | 1 | 5 | 3 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | D. | 32 | 31 | 39 | 44 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rougeole | Measles | C. | 1390 | 174 | 126 | 253 | 1047 | 33 | 51 | 29 | 51 | 139 | 103 | 178 | 96 | 99 | 82 | 121 | 65 |
| | | D. | 114 | 13 | 35 | 61 | 46 | 5 | 4 | 2 | 2 | 0 | 3 | 6 | 5 | 6 | 5 | 5 | 3 |
| Scarlatine | Scarlet fever | C. | 105 | 36 | 75 | 108 | 789 | 14 | 23 | 35 | 67 | 97 | 118 | 133 | 82 | 58 | 68 | 50 | 44 |
| | | D. | 4 | 4 | 5 | 3 | 20 | 0 | 1 | 0 | 1 | 1 | 4 | 2 | 5 | 2 | 3 | 1 | 0 |
| Septicémie puerpérale | Puerperal septicæmia | C. | 28 | 25 | 22 | 28 | 25 | 3 | 1 | 4 | 2 | 3 | 2 | 0 | 0 | 3 | 2 | 2 | 3 |
| | | D. | 81 | 76 | 63 | 69 | 31 | 1 | 0 | 0 | 2 | 3 | 3 | 3 | 4 | 4 | 3 | 5 | 3 |
| Trachome | Trachoma | C. | 3 | 1 | 0 | 7 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tuberculose du larynx et des poumons | Tuberculosis of the larynx and the lungs | C. | 1653 | 1151 | 1172 | 957 | 1178 | 104 | 118 | 92 | 76 | 87 | 70 | 121 | 118 | 80 | 117 | 98 | 97 |
| | | D. | 1963 | 1846 | 1891 | 1821 | 1449 | 128 | 125 | 101 | 116 | 127 | 107 | 142 | 121 | 120 | 111 | 133 | 118 |
| Varicelle | Chickenpox | C. | 203 | 160 | 157 | 170 | 231 | 16 | 4 | 13 | 22 | 18 | 46 | 50 | 36 | 39 | 29 | 25 | 33 |
| | | D. | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 |
| Variole | Smallpox | C. | 0 | 31 | 0 | 23 | 162 | 6 | 23 | 23 | 14 | 24 | 11 | 25 | 3 | 10 | 7 | 8 | 8 |
| | | D. | 2 | 15 | 0 | 16 | 7 | 0 | 1 | 1 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 1 | 0 |

5 cas et 5 décès de dysenterie en 1922, pas de cas ni de décès en 1923. — 5 cases of and 5 deaths from dysentery in 1922; no case nor death in 1923.
Pas de cas de choléra asiatique ou de fièvre jaune, 1919-1923. — No case of Asiatic cholera or yellow fever, 1919-1923.

# ASIE — ASIA

## PROTECTORAT D'ADEN (Arabie) — ADEN PROTECTORATE (Arabia) (Population: 54 923. 1921.)

**Nombre de cas de maladies transmissibles et de décès dus à ces maladies constatés en 1923 et 1924; par périodes de quatre semaines en 1924**
**Number of Cases of and Deaths from Communicable Diseases reported in 1923 and 1924; by four-week periods in 1924.**

*Source:* Rapports du Ministère britannique de Santé. — Reports from British Ministry of Health.

| Maladie — Disease | | | Total 1923 | Total 1924 | Période de quatre semaines finissant le: — Four-week period ending: Jan. Jan. 26 | Fév. Feb. 23 | Mars March 22 | Avril April 19 | Mai May 17 | Juin June 14 | Juil. July 12 | Août Aug. 9 | Sept. Sept. 6 | Oct. Oct. 4 | Nov. Nov. 1 | Nov. Nov. 29 | Déc. Dec. 27 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dengue | Dengue | C. | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | D. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dysenterie | Dysentery | C. | 12 | 22 | 2 | 1 | 2 | 1 | 0 | 0 | 2 | 4 | 6 | 2 | 1 | 1 | 0 |
| | | D. | 3 | 11 | 0 | 4 | 3 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 |
| Fièvre récurrente | Relaps. fever | C. | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | D. | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fièvre typhoïde | Enteric fever | C. | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| | | D. | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Grippe | Influenza | C. | 0 | 13 | 0 | 12 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Paludisme | Malaria | C. | 0 | 97 | 0 | 0 | 41 | 8 | 0 | 37 | 0 | 1 | 9 | 0 | 0 | 0 | 1 |
| Pneumonie | Pneumonia | C. | 30 | 30 | 2 | 1 | 1 | 3 | 7 | 3 | 3 | 3 | 4 | 1 | 1 | 0 | 1 |
| | | D. | 16 | 13 | 1 | 2 | 1 | 1 | 3 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 |
| Varicelle | Chickenpox | C. | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Variole | Smallpox | C. | 43 | 9 | 1 | 0 | 5 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | D. | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |

Pas de cas de choléra asiatique, de peste, de fièvre jaune ou de typhus exanthématique, 1923-1924. — No case of Asiatic cholera, plague, yellow fever or typhus, 1923-1924.

## CEYLAN — CEYLON (Population: 4 504 549. R. mars 1921.)

**Nombre de décès causés par la peste et par la variole déclarés en 1923 et 1924; par périodes de quatre semaines en 1924.**
**Number of Deaths from Plague and Smallpox reported in 1923 and 1924; by four-week periods in 1924.**

*Source:* Rapports du Ministère britannique de Santé. — Reports from the British Ministry of Health.

| Maladie Disease | | | Total 1923 | Total 1924 | Période de quatre semaines finissant le: — Four-week period ending: Janv. Jan. 26 | Févr. Febr. 23 | Mars March 22 | Avril April 19 | Mai May 17 | Juin June 14 | Juillet July 12 | Août Aug. 9 | Sept. Sept. 6 | Oct. Oct. 4 | Nov. Nov. 1 | Nov. Nov. 29 | Déc Dec. 27 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Choléra asiatique * | Asiatic cholera * | C. | — | 17 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 4 | 2 | 2 | 5 |
| | | D. | 8 | 14 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 4 | 1 | 2 | 5 |
| Peste | Plague | D. | 213 | 131 | 33 | 20 | 11 | 22 | 8 | 3 | 4 | 15 | 3 | 1 | 0 | 7 | 4 |
| Variole | Smallpox | C. | 175 | 40 | 5 | 4 | 1 | 1 | 1 | 0 | 1 | 0 | 3 | 7 | 9 | 8 | 0 |
| | | D. | 33 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |

* Choléra asiatique: 628 cas en 1919 et 115 cas en 1920. — Asiatic cholera: 628 cases in 1919 and 115 cases in 1920.

Autres maladies déclarées: — Other diseases reported:

| | Dysenterie Dysentery | Fièvre récurrente Relapsing fever | Grippe Influenza | Méningite cérébro-spinale Cerebro-spinal meningitis | Pneumonie Pneumonia | Typhus exanth. Typhus |
|---|---|---|---|---|---|---|
| 1924 | 15 | 15 | 19 | 1 | 53 | 3 |

Rapports des hôpitaux de Ceylan.
Hospital Returns for Ceylon.

Nombre de cas de maladies infectieuses et de décès dus à ces maladies enregistrés dans les hôpitaux de Ceylan.
Number of Cases of and Deaths from Certain Infectious Diseases registered in the Hospitals of Ceylon.

| Maladie — Disease | | | 1920 | 1921 | 1922 | 1923 |
|---|---|---|---|---|---|---|
| Peste | Plague | C. | 369 | 187 | 160 | 139 |
| | | D. | 316 | 171 | 150 | 101 |
| Ankylostom. | Ankylostom. | C. | 11414 | 11082 | 9822 | 10898 |
| | | D. | 1943 | 1721 | 987 | 1030 |
| Dysenterie | Dysentery | C. | 4790 | 5518 | 3446 | 5717 |
| | | D. | — | — | 673 | 993 |
| Fièvre typh. | Enteric fever | C. | 1077 | 942 | 857 | 888 |
| | | D. | 280 | 242 | 188 | 270 |
| Lèpre | Leprosy | C. | — | *a* 505 | 100 | 294 |
| Variole | Smallpox | C. | 126 | 18 | 337 | 99 |
| | | D. | — | — | 43 | 8 |

Décès dus à certaines maladies infectieuses notifiés par le « Registrar-General » de Ceylan.

Deaths from Certain Infectious Diseases reported by the Registrar-General for Ceylon.

| Cause de décès — Cause of Death | | 1921 | 1922 | 1923 |
|---|---|---|---|---|
| Ankylostomiase | Ankylostomiasis | 2930 | 1869 | 1857 |
| Diarrhée | Diarrhæa | 12573 | 9700 | 10888 |
| Dysenterie | Dysentery | 4255 | 2515 | 3325 |
| Fièvre typhoïde | Enteric fever | 668 | 542 | 597 |
| Paludisme | Malaria | 1502 | 1621 | 2118 |
| Phtisie | Phthisis | 3148 | 3108 | 3322 |
| Pneumonie | Pneumonia | 6708 | 7486 | 8921 |
| Rachitisme | Rickets | 6462 | 5119 | 5097 |
| Rage humaine | Rabies | 18 | 25 | 30 |
| Septicémie puerp. | Puerp. septicæm. | 1667 | 1540 | 1568 |
| Tétanos | Tetanus | 230 | 247 | 241 |

*a* Nombre de lépreux existant au 31 décembre 1921. — Number of lepers remaining on December 31st, 1921.

## CHINE — CHINA

CHANG-HAÏ (Ville Internationale) — SHANGHAI (International Settlement)

(Population: 27 357, E. 30 juin 1924.)
Etrangers — Foreigners.

**Nombre de cas de certaines maladies et de décès dus à ces maladies déclarés en 1924; par mois.**
**Number of Cases of and Deaths from Certain Diseases notified in 1924; by months.**

*Source:* Rapport mensuel du Commissariat d'Hygiène publié dans la « Gazette officielle ».
Monthly Public Health Report in the "Municipal Gazette".

| Maladie — Disease | | | Total 1924 | Janv. Jan. | Févr. Febr. | Mars March | Avril April | Mai May | Juin June | Juillet July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Béri-béri | Beri-beri | D. | 28 | 2 | 3 | 1 | 3 | 3 | 2 | 1 | 2 | 5 | 3 | 1 | 2 |
| Coqueluche | Whooping-cough | D. | 5 | 1 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diphtérie | Diphtheria | C. | 45 | 3 | 2 | 11 | 4 | 1 | 0 | 2 | 1 | 2 | 2 | 6 | 11 |
| | | D. | 5 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Dysenterie | Dysentery | C. | 148 | 0 | 1 | 2 | 3 | 3 | 3 | 12 | 14 | 45 | 50 | 6 | 9 |
| | | D. | 11 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 1 | 2 | 1 |
| Fièvre récurrente | Relapsing fever | C. | 2 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fièvre paratyphoïde | Paratyph. fever | C. | 20 | 1 | 1 | 0 | 1 | 3 | 0 | 1 | 1 | 4 | 1 | 1 | 6 |
| | | D. | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Fièvre typhoïde | Typhoid fever | C. | 37 | 2 | 0 | 1 | 2 | 2 | 2 | 2 | 4 | 4 | 7 | 5 | 6 |
| | | D. | 18 | 1 | 2 | 0 | 0 | 0 | 1 | 1 | 6 | 2 | 2 | 0 | 3 |
| Grippe | Influenza | C. | 13 | 4 | 2 | 6 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | D. | 9 | 1 | 1 | 4 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | D. | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Rougeole | Measles | C. | 7 | 1 | 3 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | D. | 6 | 0 | 1 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Scarlatine | Scarlet fever | C. | 23 | 4 | 0 | 1 | 3 | 5 | 0 | 0 | 0 | 3 | 5 | 0 | 2 |
| | | D. | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 |
| Tuberculose | Tuberculosis | D. | 69 | 4 | 5 | 7 | 10 | 8 | 3 | 3 | 3 | 3 | 8 | 6 | 9 |
| Typhus exanth. | Typhus | D. | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Variole | Smallpox | C. | 46 | 21 | 10 | 8 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| | | D. | 20 | 12 | 3 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## CHYPRE — CYPRUS

(Population: 321 945. E. 31 déc. 1923)

**Nombre de cas de quelques maladies transmissibles constatés en 1919-1923.**
**Number of Cases of Certain Communicable Diseases reported in 1919-1923.**

*Source:* Rapport médical annuel. — Annual Medical Report.

| Maladie — Disease | | 1919 | 1920 | 1921 | 1922 | 1923 |
|---|---|---|---|---|---|---|
| Fièvre typhoïde | Enteric fever | 439 | 395 | 360 | 346 | 314 |
| Méningite cérébro-spinale | Cerebro-spinal mening. | 10 | 9 | 27 | 7 | 4 |
| Paludisme | Malaria | 1962 | 3706 | 4291 | 4008 | 4463 |
| Phtisie | Phthisis | 130 | 95 | 99 | 108 | 132 |

Autres maladies déclarées: — Other diseases reported:

| | Diphtérie Diphtheria | Dysenterie Dysentery | Grippe Influenza | Trachome Trachoma | Variole Smallpox |
|---|---|---|---|---|---|
| 1919 | 7 | 538 | 4541 | 465 | 242 |
| 1920 | 1 | 769 | 4014 | 334 | 17 |
| 1921 | 1 | 827 | 3507 | 185 | 8 |
| 1922 | 7 | 798 | 4169 | 227 | 86 |
| 1923 | 8 | 570 | 2625 | 300 | 1 |

## CORÉE — KOREA *(Chosen)*

(Population: 17 626 761. E. 31 déc. 1922.)

**Nombre de cas de maladies à déclaration obligatoire et de décès causés par ces maladies déclarés en 1920-1924; par mois en 1924.**
**Number of Cases of and Deaths from Notifiable Diseases reported in 1920-1924; by months in 1924.**

*Source:* Rapports du Gouvernement général de Corée au Bureau de la Statistique générale du Cabinet Impérial. — Report of the Government General of Chosen to the Bureau of Statistics of the Imperial Cabinet.

| Maladie — Disease | | | Total 1920 | Total 1921 | Total 1922 | Total 1923 | Total 1924 | Janv. Jan. | Fév. Feb. | Mars Mar. | Avril April | Mai May | Juin June | Juil. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Choléra asiatiq. | Asiatic cholera | C. | 24229 | 1 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | D. | 13568 | 1 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diphtérie | Diphtheria | C. | 264 | 238 | 265 | 419 | 523 | 47 | 58 | 70 | 38 | 48 | 30 | 9 | 14 | 39 | 47 | 61 | 62 |
| | | D. | 69 | 93 | 101 | 141 | 185 | 26 | 22 | 24 | 16 | 19 | 13 | 1 | 4 | 8 | 14 | 19 | 19 |
| Dysenterie | Dysentery | C. | 974 | 978 | 1932 | 1186 | 1443 | 11 | 11 | 9 | 9 | 50 | 251 | 319 | 346 | 271 | 128 | 26 | 12 |
| | | D. | 253 | 311 | 529 | 296 | 386 | 2 | 6 | 4 | 4 | 15 | 45 | 72 | 91 | 80 | 45 | 16 | 6 |
| Fièvre para-typhoïde | Paratyphoid fever | C. | 220 | 300 | 473 | 314 | 301 | 18 | 5 | 6 | 13 | 32 | 37 | 18 | 36 | 34 | 43 | 51 | 8 |
| | | D. | 23 | 33 | 52 | 30 | 16 | 3 | 0 | 1 | 0 | 1 | 3 | 1 | 2 | 2 | 2 | 0 | 1 |
| Fièvre typhoïde | Typhoid fever | C. | 2140 | 2535 | 3800 | 2837 | 3273 | 125 | 161 | 257 | 249 | 332 | 304 | 285 | 278 | 367 | 354 | 324 | 237 |
| | | D. | 422 | 485 | 768 | 509 | 567 | 30 | 25 | 35 | 37 | 46 | 43 | 41 | 53 | 61 | 60 | 78 | 58 |
| Scarlatine | Scarlet fever | C. | 371 | 717 | 585 | 1008 | 1361 | 177 | 162 | 198 | 184 | 155 | 179 | 82 | 28 | 23 | 56 | 80 | 37 |
| | | D. | 106 | 209 | 239 | 242 | 340 | 41 | 54 | 45 | 62 | 32 | 38 | 26 | 6 | 7 | 7 | 15 | 7 |
| Typhus exanthém. | Typhus | C. | 78 | 73 | 63 | 27 | 540 | 30 | 74 | 108 | 90 | 145 | 61 | 18 | 4 | 4 | 5 | 1 | 0 |
| | | D. | 20 | 18 | 20 | 4 | 94 | 5 | 11 | 18 | 18 | 25 | 8 | 3 | 2 | 2 | 1 | 1 | 0 |
| Variole | Smallpox | C. | 11532 | 8316 | 3676 | 3722 | 439 | 4 | 58 | 110 | 132 | 52 | 41 | 19 | 8 | 4 | 3 | 1 | 7 |
| | | D. | 3614 | 2527 | 1160 | 1120 | 85 | 0 | 9 | 24 | 26 | 6 | 10 | 6 | 0 | 0 | 3 | 0 | 1 |

*a* Total pour sept mois seulement. — Total for seven months only.

## HONG-KONG

(Population: 625 166. R. 24 avril 1921.)

**Nombre de cas de maladies à déclaration obligatoire et de décès dus à ces maladies déclarés en 1919-1924; par périodes de deux semaines en 1924.**
**Number of Cases of and Deaths from Notifiable Diseases reported in 1919-1924; by two-week periods in 1924.**

*Sources:* Rapport sanitaire, 1922; Rapports périodiques du Ministère britannique de Santé 1923-1924. Sanitary Report, 1922; Current Reports from British Ministry of Health 1923-1924.

| Quinzaine finissant le: Fortnight ending: | Diphtérie Diphtheria | | Grippe Influenza | Méningite cérébro-spinale Cerebro-spinal meningitis | | Variole Smallpox | |
|---|---|---|---|---|---|---|---|
| | C. | D. | D. | C. | D. | C. | D. |
| Total 1919 | 50 | 36 | 449 | 269 | 204 | 27 | 15 |
| » 1920 | 76 | 28 | 542 | 158 | 103 | 34 | 21 |
| » 1921 | 85 | 38 | 303 | 125 | 73 | 191 | 162 |
| » 1922 | 71 | 32 | 422 | 53 | 38 | 212 | 189 |
| » 1923 | 91 | 43 | 83 | 107 | 95 | 1320 | 1141 |
| » 1924 | 88 | 40 | 37 | 80 | 65 | 941 | 854 |
| Janvier — January 12 | 6 | 2 | 0 | 0 | 1 | 195 | 220 |
| 26 | 6 | 1 | 0 | 0 | 0 | 201 | 193 |
| Février — February 9 | 2 | 1 | 2 | 1 | 0 | 158 | 86 |
| 23 | 3 | 1 | 1 | 2 | 2 | 132 | 133 |
| Mars — March 8 | 4 | 1 | 0 | 5 | 3 | 88 | 84 |
| 22 | 2 | 1 | 0 | 12 | 12 | 60 | 52 |
| Avril — April 5 | 1 | 2 | 2 | 7 | 4 | 27 | 23 |
| 19 | 2 | 1 | 4 | 5 | 4 | 29 | 26 |
| Mai — May 3 | 3 | 1 | 2 | 6 | 6 | 13 | 9 |
| 17 | 4 | 4 | 0 | 8 | 8 | 19 | 16 |
| 31 | 4 | 2 | 3 | 6 | 5 | 7 | 4 |
| Juin — June 14 | 3 | 2 | 3 | 1 | 1 | 3 | 3 |
| 28 | 8 | 2 | 0 | 4 | 2 | 1 | 1 |
| Juillet — July 12 | 6 | 4 | 5 | 2 | 2 | 3 | 3 |
| 26 | 1 | 0 | 4 | 1 | 0 | 0 | 0 |
| Août — August 9 | 2 | 1 | 1 | 4 | 3 | 0 | 0 |
| 23 | 3 | 1 | 1 | 4 | 3 | 0 | 0 |
| Septembre — September 6 | 3 | 2 | 1 | 0 | 0 | 0 | 0 |
| 20 | 2 | 0 | 2 | 3 | 2 | 0 | 0 |
| Octobre — October 4 | 0 | 0 | 1 | 2 | 1 | 0 | 0 |
| 18 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| Novembre — November 1 | 2 | 0 | 1 | 0 | 0 | 0 | 0 |
| 15 | 2 | 2 | 1 | 0 | 0 | 1 | 0 |
| 29 | 7 | 3 | 1 | 2 | 1 | 0 | 0 |
| Décembre — December 13 | 4 | 2 | 0 | 2 | 2 | 4 | 1 |
| 27 | 7 | 4 | 1 | 3 | 3 | 0 | 0 |

Autres maladies déclarées: — Other diseases reported:

| | 1919 | | 1920 | | 1921 | | 1922 | | 1923 | | 1924 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. |
| Choléra asiatique — Asiatic cholera | 46 | 42 | 6 | 6 | 5 | 5 | 1 | 0 | 1 | 1 | 0 | 0 |
| Fièvre récurrente — Relapsing fever | 0 | 0 | 0 | 0 | 1 | 0 | 5 | 5 | 1 | 0 | 0 | 0 |
| Peste — Plague | 464 | 426 | 138 | 120 | 150 | 130 | 1181 | 1071 | 148 | 136 | 0 | 0 |
| Typhus exanth. — Typhus | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |

## ÉTABLISSEMENTS DES DÉTROITS — STRAITS SETTLEMENTS

(Population: 935 210. E. 1923.)

**Nombre de décès causés par certaines maladies infectieuses, 1919-1924.**
**Number of Deaths from certain Infectious Diseases, 1919-1924.**

*Sources:* Annual Report of the Medical Department, 1919, 1920, 1921, 1922, 1923.
Rapports du Ministère britannique de Santé, 1924. — Reports from British Ministry of Health, 1924.

| Maladie — Disease | | | Total 1919 | Total 1920 | Total 1921 | Total 1922 | Total 1923 | Total 1924 |
|---|---|---|---|---|---|---|---|---|
| Béri-béri | Beri-beri | D. | 1430 | 1025 | 1299 | 1388 | 904 | 908 |
| Choléra asiatique | Asiatic cholera | C. | 94 | 58 | 6 | 3 | 0 | 12 |
| | | D. | 71 | 37 | 4 | 2 | 0 | 9 |
| Diphtérie | Diphtheria | D. | 11 | 25 | 13 | 13 | 10 | 6 |
| Dysenterie | Dysentery | D. | 1209 | 1085 | 1090 | 1085 | 839 | 762 |
| Fièvre typhoïde | Enteric fever | D. | 94 | 103 | 117 | 53 | 52 | 47 |
| Grippe | Influenza | D. | *a* | 362 | 207 | 234 | 162 | 164 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | C. | *a* | 29 | 86 | 85 | 20 | 20 |
| | | D. | *a* | 22 | 54 | 45 | 14 | 16 |
| Paludisme | Malaria | D. | 4843 | 4690 | 4703 | 3977 | 3430 | 3119 |
| Peste | Plague | C. | 19 | 61 | 27 | 39 | 59 | 19 |
| | | D. | 16 | 55 | 27 | 39 | 55 | 18 |
| Pneumonie | Pneumonia | D. | | 1966 | 1230 | 1608 | 1710 | 1670 |
| Tuberculose | Tuberculosis | D. | 3112 | 3336 | 3258 | 2966 | 2683 | 2461 |
| Variole | Smallpox | C. | 480 | 105 | 155 | 330 | 36 | 14 |
| | | D. | 166 | 43 | 37 | 80 | 3 | 7 |

*a* Pas de renseignements. — No report.

## INDES BRITANNIQUES — BRITISH INDIA

(Population: 318 942 480. R. 18 mars 1921.)

**Nombre de décès causés par le choléra asiatique, la peste et la variole en 1919-1924.**
**Number of Deaths from Asiatic Cholera, Plague and Smallpox in 1919-1924.**

*Sources:* Annual Reports of the Public Health Commissioner with the Government of India, 1919-1922; Quarterly Reports for Births and Deaths, 1923 and 1924.

| Province | Choléra asiatique — Asiatic cholera | | | | | Peste — Plague | | | | | Variole — Smallpox | | | | | Province |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1920 | 1921 | 1922 | 1923 | 1924 | 1920 | 1921 | 1922 | 1923 | 1924 | 1920 | 1921 | 1922 | 1923 | 1924 | |
| *Provinces britann.* | | | | | | | | | | | | | | | | *British Provinces* |
| Ajmer-Merwara . . | 1 | 35 | 2 | *a* | *a* | 0 | 0 | 2 | *a* | *a* | 325 | 724 | 8 | *a* | *a* | Ajmer-Merwara |
| Assam . . . . . | 2421 | 12829 | 16219 | 3825 | 15653 | 0 | 0 | 0 | 0 | 0 | 1700 | 2774 | 2610 | 3219 | 1549 | Assam |
| Bihar et Orissa . . | 26341 | 90688 | 26805 | 8130 | 75037 | 19108 | 16504 | 15066 | 28822 | 10549 | 23001 | 7836 | 2560 | 3116 | 6731 | Bihar and Orissa |
| Birmanie . . . . . | 3396 | 3791 | 5047 | 1825 | 2538 | 5483 | 4403 | 7282 | 7628 | 4302 | 2853 | 987 | 1439 | 2720 | 782 | Burma |
| Courg . . . . . | 6 | 0 | 4 | 0 | 0 | 68 | 1 | 8 | 0 | 0 | 108 | 6 | 1 | 0 | 65 | Coorg |
| Pendjab . . . . . | 138 | 19215 | 128 | 0 | 3261 | 6137 | 2553 | 7780 | 49723 | 248950 | 9319 | 4575 | 1608 | 2053 | 3573 | Punjab |
| Présid. du Bengale . | 54199 | 80547 | 51712 | 41483 | 41899 | 66 | 59 | 150 | 82 | 35 | 36190 | 8157 | 7864 | 4234 | 5170 | Bengal Presidency |
| Présid. de Bombay . | 2047 | 3521 | 2768 | 8735 | 8660 | 13857 | 4672 | 8379 | 32165 | 8142 | 3536 | 1771 | 1170 | 2495 | 8834 | Bombay Presidency |
| Présidence de Madras | 31139 | 27064 | 16502 | 4929 | 44477 | 14652 | 11875 | 9193 | 11719 | 3633 | 13697 | 9792 | 22801 | 22433 | 13773 | Madras Presidency |
| Provinces Centrales | 3491 | 58331 | 64 | 1090 | 10139 | 14374 | 5467 | 6149 | 26297 | 10736 | 2176 | 1787 | 407 | 275 | 928 | Central Provinces |
| Province de Delhi . | 7 | 635 | 6 | 10 | 121 | 19 | 1 | 191 | 2795 | 2435 | 19 | 22 | 22 | 67 | 128 | Delhi Province |
| Provinces frontières du Nord-Ouest . . | 2 | 4285 | 92 | 0 | 0 | 732 | 138 | 124 | 3738 | 12105 | 2051 | 576 | 104 | 94 | 198 | North-West Frontier Provinces |
| Provinces Unies . . | 6952 | 149667 | 2330 | 2595 | 66131 | 24872 | 24009 | 23291 | 74088 | 52909 | 6354 | 1439 | 242 | 734 | 2365 | United Provinces |
| Total . | 130140 | 450608 | 121679 | 72622 | 267916 | 99368 | 69682 | 77615 | 237057 | 353796 | 101329 | 40446 | 40836 | 41440 | 44096 | Total |
| *Agences et Etats indiens:* | | | | | | | | | | | | | | | | *Indian States and Agencies:* |
| Etat d'Haiderabad . | 57 | 1381 | *a* | *a* | 3158 | 20128 | 1294 | *a* | *a* | 11325 | *a* | *a* | *a* | *a* | 247 | Hyderabad State |
| Etat de Mysore . . | 220 | 25 | 46 | *a* | *a* | 7670 | 8244 | 8945 | *a* | 1836 | *a* | *a* | 1149 | *a* | *a* | Mysore State |
| Autres agences et Etats indiens . . | *a* | *a* | 14 | 73 | 5493 | 13093 | 2301 | 287 | 2424 | 10932 | *a* | *a* | 67 | 131 | 2031 | Other Indian States and Agencies |
| Total . | 277 | 1406 | 60 | 73 | 8651 | 40891 | 11839 | 9232 | 2424 | 24093 | *a* | *a* | 1216 | 131 | 2278 | Total |
| Total pour les Indes | 130417 | 452014 | 121739 | 72695 | 276567 | 140259 | 81521 | 86847 | 239481 | 377889 | 101329 | 40446 | 42052 | 41571 | 46374 | Total for India |

*a* Les données manquent. — Data not received.

## INDES BRITANNIQUES — BRITISH INDIA

(Population: 318 942 480. R. 18 mars, 1921.)

**Nombre de cas de choléra asiatique, de peste et de variole et de décès causés par ces maladies en 1919-1924; par semaines en 1924.**
**Number of Cases of and Deaths from Asiatic Cholera, Plague and Smallpox in 1919-1924; by weeks in 1924.**

*Sources:* Annual Reports of the Public Health Commissioner with the Government of India, 1919-1922. — Reported Attacks and Deaths from Plague, Cholera and Smallpox in British India and the Indian States.

| Semaine finissant le: Week ending: | Choléra asiatique Asiatic cholera | | Peste Plague | | Variole Smallpox | |
|---|---|---|---|---|---|---|
| | C. | D. | C. | D. | C. | D. |
| Total 1919 | — | 594053 | — | 98582 | — | 136077 |
| Total 1920 | — | 130417 | — | 140259 | — | 101329 |
| Total 1921 | — | 452014 | — | 81521 | — | 40446 |
| Total 1922 | — | 118703 | — | 76531 | — | 38812 |
| Total 1923 | 67024 | 72695 | 261979 | 239481 | 70142 | 41571 |
| * Total 1924 | 292294 | 185861 | 304969 | 239874 | 117804 | 25446 |
| Janvier —January 5 | 1268 | 890 | 3687 | 2704 | 1006 | 363 |
| 12 | 1357 | 847 | 4051 | 2923 | 1859 | 566 |
| 19 | 1089 | 642 | 4870 | 3679 | 1370 | 412 |
| 26 | 1286 | 762 | 5623 | 4108 | 2075 | 469 |
| Février — February 2 | 1439 | 846 | 6120 | 4805 | 2133 | 453 |
| 9 | 1353 | 778 | 6169 | 4839 | 3216 | 657 |
| 16 | 1184 | 685 | 7838 | 5888 | 3504 | 609 |
| 23 | 963 | 547 | 8276 | 6516 | 3666 | 688 |
| Mars — March 1 | 1850 | 1059 | 9712 | 7313 | 3948 | 764 |
| 8 | 2618 | 1422 | 11460 | 8773 | 5504 | 895 |
| 15 | 2742 | 1638 | 12371 | 9634 | 5830 | 897 |
| 22 | 3477 | 2194 | 13429 | 10394 | 5458 | 858 |
| 29 | 7388 | 4310 | 14674 | 11362 | 4713 | 1011 |
| Avril — April 5 | 8217 | 6273 | 16891 | 13068 | 4108 | 941 |
| 12 | 12783 | 8850 | 16224 | 12588 | 4382 | 909 |
| 19 | 10947 | 8068 | 19468 | 15591 | 3519 | 872 |
| 26 | 11647 | 8637 | 18688 | 15325 | 3859 | 781 |
| Mai — May 3 | 10010 | 7619 | 15606 | 13323 | 3545 | 768 |
| 10 | 8339 | 6318 | 14128 | 11554 | 3074 | 827 |
| 17 | 9034 | 6521 | 11618 | 8969 | 3691 | 790 |
| 24 | 7786 | 5018 | 14553 | 11619 | 3447 | 788 |
| 31 | 7586 | 5412 | 8153 | 7300 | 3290 | 664 |
| Juin — June 7 | 7681 | 4965 | 8381 | 6831 | 2342 | 657 |
| 14 | 7826 | 4841 | 5112 | 4425 | 2055 | 488 |
| 21 | 10102 | 6318 | 4478 | 3645 | 2127 | 618 |
| 28 | 9168 | 4795 | 1958 | 1665 | 2316 | 674 |
| Juillet — July 5 | 8964 | 4772 | 833 | 745 | 1788 | 468 |
| 12 | 6835 | 3974 | 277 | 332 | 1685 | 485 |
| 19 | 6493 | 3861 | 138 | 183 | 3515 | 499 |
| 26 | 6615 | 3717 | 101 | 72 | 1591 | 311 |
| Août — August 2 | 9744 | 5517 | 168 | 101 | 1269 | 273 |
| 9 | 11070 | 6601 | 229 | 149 | 948 | 249 |
| 16 | 7988 | 4654 | 265 | 160 | 858 | 230 |
| 23 | 10174 | 6243 | 598 | 357 | 839 | 172 |
| 30 | 9581 | 5822 | 521 | 321 | 745 | 207 |
| Septembre — September 6 | 9482 | 5840 | 684 | 437 | 731 | 174 |
| 13 | 7667 | 4759 | 788 | 513 | 717 | 164 |
| 20 | 6180 | 3676 | 1138 | 782 | 827 | 157 |
| 27 | 4669 | 3119 | 1163 | 819 | 729 | 162 |
| Octobre — October 4 | 3661 | 1999 | 1185 | 833 | 649 | 184 |
| 11 | 3640 | 2127 | 1471 | 998 | 581 | 129 |
| 18 | 3147 | 1879 | 2094 | 1503 | 794 | 199 |
| 25 | 1666 | 1611 | 2597 | 1953 | 844 | 153 |
| Novembre — November 1 | 2655 | 1624 | 2669 | 1990 | 613 | 171 |
| 8 | 2992 | 1764 | 2382 | 1791 | 823 | 179 |
| 15 | 2027 | 1305 | 2452 | 1730 | 887 | 192 |
| 22 | 1994 | 1246 | 2786 | 2046 | 996 | 217 |
| 29 | 3378 | 2011 | 2777 | 2155 | 1061 | 243 |
| Décembre — December 6 | 2292 | 1458 | 2535 | 2050 | 1381 | 312 |
| 13 | 2627 | 1629 | 2687 | 2047 | 1481 | 315 |
| 20 | 2721 | 1599 | 2860 | 2189 | 1519 | 329 |
| 27 | 2503 | 1388 | 2777 | 2027 | 1602 | 363 |
| 1925 Janvier — January 3 | 2389 | 1411 | 3256 | 2750 | 1994 | 490 |

* 53 semaines. — 53 weeks.

Les rapports hebdomadaires sont incomplets; les totaux de ce fait sont moins élevés que les figures annuelles qui sont prises des rapports trimestriels. — The weekly records are incomplete and the totals are therefore lower than the annual figures which are compiled from quarterly returns.

## INDES NÉERLANDAISES — DUTCH EAST INDIES

**Nombre de cas de certaines maladies contagieuses et de décès dus à ces maladies déclarés en 1924; par périodes de quatre semaines.**
**Number of Cases of and Deaths from Certain Contagious Diseases reported in 1924; by four-week periods.**

*Source*: Rapports périodiques du Service médical civil, Weltevreden — Current Reports from Civil Medical Service, Weltevreden.

| Maladie — Disease | | | Total 1924 | Périodes de quatre semaines finissant le — four-week periods ending: 29 Janv. Jan. | 25 Févr Feb. | 24 Mars Mar. | 21 Avril April | 19 Mai May | 16 Juin June | 14 Juill. July | 11 Août Aug. | 8 Sept. Sept. | 6 Oct. Oct. | 3 Nov. Nov. | 2 Déc. Dec | 31. Déc Dec. *a* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Java et Madoura — Java and Madura (Population: 34 984 171. R. Nov. 1920)** | | | | | | | | | | | | | | | | |
| Diphtérie | Diphtheria | C. | 341 | 28 | 35 | 27 | 33 | 22 | 20 | 21 | 24 | 19 | 17 | 32 | 30 | 33 |
| | | D. | 33 | 3 | 4 | 2 | 2 | 3 | 1 | 1 | 0 | 1 | 3 | 4 | 7 | 2 |
| Dysenterie bacillaire | Dysentery, bacillary | C. | 4592 | 1554 | 1136 | 493 | 218 | 159 | 180 | 134 | 64 | 36 | 33 | 108 | 122 | 355 |
| | | D. | 1405 | 486 | 362 | 173 | 99 | 77 | 67 | 38 | 14 | 3 | 3 | 21 | 11 | 51 |
| Fièvre typhoïde | Enteric fever | C. | 1401 | 125 | 105 | 106 | 86 | 72 | 87 | 114 | 108 | 82 | 106 | 135 | 129 | 146 |
| | | D. | 226 | 21 | 22 | 22 | 11 | 15 | 9 | 15 | 15 | 15 | 15 | 20 | 23 | 23 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | C. | 21 | 0 | 4 | 4 | 0 | 4 | 2 | 0 | 1 | 1 | 3 | 0 | 0 | 2 |
| | | D. | 9 | 0 | 1 | 0 | 0 | 3 | 2 | 0 | 1 | 1 | 1 | 0 | 0 | 0 |
| Peste | Plague | D. | 13078 | 926 | 773 | 573 | 410 | 384 | 338 | 518 | 704 | 880 | 1187 | 1369 | 1984 | 3032 |
| Variole | Smallpox | C. | 5994 | 304 | 349 | 243 | 281 | 241 | 336 | 241 | 490 | 902 | 1005 | 753 | 511 | 338 |
| | | D. | 1301 | 52 | 69 | 52 | 66 | 58 | 85 | 47 | 95 | 191 | 223 | 183 | 106 | 74 |
| **Principaux ports de Java. — Principal Ports in Java (Population: 825 000. 1920)** | | | | | | | | | | | | | | | | |
| Dysenterie bacillaire | Dysentery, bacillary | C. | 279 | 124 | 48 | 13 | 3 | 5 | 4 | 10 | 8 | 5 | 9 | 15 | 19 | 16 |
| | | D. | 15 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 2 | 2 | 2 |
| Fièvre typhoïde | Enteric fever | C. | 574 | 70 | 51 | 47 | 33 | 38 | 40 | 39 | 45 | 35 | 35 | 50 | 38 | 53 |
| | | D. | 101 | 11 | 12 | 14 | 1 | 5 | 3 | 7 | 7 | 6 | 7 | 11 | 10 | 7 |
| Grippe | Influenza | C. | 248 | 35 | 181 | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | D. | 44 | 5 | 17 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | C. | 15 | 0 | 4 | 4 | 0 | 4 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| | | D. | 6 | 0 | 1 | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Peste | Plague | C. | 60 | 14 | 10 | 9 | 0 | 0 | 1 | 0 | 0 | 1 | 6 | 3 | 6 | 10 |
| | | D. | 56 | 14 | 10 | 9 | 0 | 0 | 1 | 0 | 0 | 1 | 6 | 1 | 5 | 9 |
| Variole | Smallpox | C. | 848 | 20 | 24 | 32 | 33 | 38 | 52 | 36 | 82 | 144 | 173 | 115 | 56 | 43 |
| | | D. | 499 | 2 | 10 | 13 | 21 | 31 | 34 | 19 | 42 | 81 | 104 | 77 | 42 | 23 |
| **Principaux ports des autres iles — Principal Ports in Other Islands (Population: 350 000. 1920)** | | | | | | | | | | | | | | | | |
| Dysenterie bacillaire | Dysentery, bacillary | C. | 82 | 4 | 8 | 15 | 11 | 7 | 1 | 2 | 0 | 6 | 8 | 8 | 5 | 7 |
| | | D. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fièvre typhoïde | Enteric fever | C. | 165 | 14 | 21 | 8 | 13 | 6 | 15 | 15 | 9 | 11 | 16 | 20 | 7 | 10 |
| | | D. | 8 | 0 | 2 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 0 | 0 | 1 |
| Grippe | Influenza | C. | 207 | 23 | 40 | 0 | 0 | 14 | 0 | 25 | 16 | 20 | 19 | 16 | 7 | 27 |
| | | D. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | C. | 6 | 1 | 1 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | D. | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Peste | Plague | C. | 41 | 17 | 9 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 5 | 0 |
| | | D. | 37 | 16 | 6 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 5 | 0 |
| Variole | Smallpox | C. | 776 | 31 | 20 | 10 | 25 | 41 | 83 | 106 | 197 | 200 | 38 | 14 | 5 | 6 |
| | | D. | 32 | 5 | 1 | 0 | 1 | 6 | 5 | 4 | 3 | 4 | 0 | 0 | 0 | 3 |

*a* Données pour la période du 3 au 31 décembre. — Data given for period December 3rd to 31st.

## IRAK (Mésopotamie) — IRAQ (Mesopotamia) (Population : 2 849 282. R. 1920.)

**Nombre de cas de maladies infectieuses et de décès dus à ces maladies constatés en 1921-1924; par périodes de quatre semaines en 1924.**
**Number of Cases of and Deaths from Infectious Diseases reported in 1921-1924; by four-week periods in 1924.**

*Sources:* Rapports du Ministère britannique de Santé, 1923-1924. — Reports from British Ministry of Health, 1923-1924. Report on Iraq Administration, October 1920–March 1922 (et — and) April 1922 to March 1923.

| Maladie — Disease | | | Total 1921 | Total 1922 | Total 1923 | Total 1924 | Périodes de quatre semaines se terminant le: — Four-week periods ending: Jan. Jan. 28 | Fév. Feb. 25 | Mars Mar. 24 | Avril April 19 | Mai May 17 | Juin June 14 | Juil. July 12 | Août Aug. 9 | Sept. Sept. 6 | Oct. Oct. 4 | Nov. Nov. 1 | Nov. Nov. 29 | Déc. Dec. 27 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Choléra asiatique | Asiatic cholera | C. | 0 | 0 | 1503 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | D. | — | — | 1098 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diphtérie | Diphtheria | C. | — | 43 | 26 | 28 | 3 | 2 | 1 | 1 | 3 | 1 | 2 | 7 | 4 | 1 | 2 | 0 | 1 |
| | | D. | — | — | 8 | 9 | 1 | 2 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 2 | 0 | 1 |
| Dysenterie | Dysentery | C. | — | — | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | D. | — | — | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fièvre puerpérale | Puerperal fever | C. | — | 39 | 9 | 18 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 2 | 0 | 2 | 4 | 4 | 3 |
| | | D. | — | *a* | 6 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 2 |
| Fièvre typhoïde | Enteric fever | C. | 87 | 104 | 147 | 136 | 11 | 7 | 10 | 11 | 10 | 9 | 6 | 9 | 9 | 13 | 21 | 11 | 9 |
| | | D. | — | — | 31 | 29 | 1 | 1 | 2 | 3 | 2 | 5 | 2 | 2 | 1 | 3 | 2 | 2 | 3 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | C. | 26 | 12 | 8 | 13 | 1 | 0 | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 0 |
| | | D. | — | — | 6 | 7 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 |
| Oreillons | Mumps | C. | 92 | 229 | 54 | 144 | 12 | 21 | 11 | 6 | 4 | 6 | 11 | 6 | 9 | 7 | 15 | 11 | 25 |
| Peste | Plague | C. | 137 | 685 | 708 | 529 | 10 | 37 | 20 | 101 | 198 | 131 | 20 | 5 | 2 | 0 | 1 | 1 | 3 |
| | | D. | — | — | 413 | 308 | 4 | 31 | 10 | 68 | 99 | 78 | 12 | 2 | 2 | 0 | 1 | 0 | 1 |
| Rougeole | Measles | C. | 605 | 87 | 461 | 1466 | 227 | 121 | 199 | 56 | 223 | 157 | 198 | 127 | 42 | 26 | 26 | 59 | 5 |
| | | D. | — | — | 120 | 787 | 126 | 96 | 92 | 39 | 40 | 59 | 134 | 117 | 33 | 10 | 10 | 27 | 4 |
| Scarlatine * | Scarlet fever * | C. | — | 7 | 2 | 12 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 2 | 3 | 0 |
| Tétanos | Tetanus | C. | — | 14 | 7 | 4 | 0 | 2 | 1 | 0 | 0 | 0 | 0. | 0 | 0 | 1 | 0 | 0 | 0 |
| | | D. | — | — | 2 | 3 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Tuberculose | Tuberculosis | C. | 178 *a* | 398 *a* | 482 *b* | 814 *b* | 44 | 59 | 67 | 64 | 52 | 81 | 55 | 64 | 72 | 67 | 60 | 70 | 59 |
| | | D. | — | — | 52 | 214 | 7 | 12 | 12 | 20 | 19 | 29 | 22 | 20 | 14 | 12 | 16 | 13 | 18 |
| Typhus exanth. | Typhus | C. | 61 | 48 | 20 | 9 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 2 | 0 | 0 | 1 | 1 | 0 |
| | | D. | — | — | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 |
| Varicelle | Chickenpox | C. | 90 | 56 | 21 | 38 | 5 | 2 | 3 | 24 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 |
| | | D. | — | — | 1 | 4 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Variole | Smallpox | C. | 475 | 1826 | 885 | 548 | 164 | 50 | 39 | 19 | 31 | 59 | 15 | 10 | 14 | 63 | 19 | 43 | 22 |
| | | D. | — | — | 325 | 322 | 137 | 29 | 13 | 10 | 19 | 23 | 10 | 7 | 0 | 18 | 12 | 30 | 14 |

| Autres maladies déclarées: Other diseases reported: | Anthrax Anthrax C. | D. | Bilharzia Bilharzia C. | D. | Erysipèle Erysipelas C. | D. | Fièvre récurrente Relapsing fever C. | D. | Gale Scabies C. | D. | Lèpre Leprosy C. | D. | Méningite Meningitis C. | D. | Gonorrhée Gonorrhœa C. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1922 | 6 | — | — | — | — | — | — | — | — | — | 42 | — | — | — | — |
| 1923 | 8 | 1 | 3 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 4 | 2 | 1 |
| 1924 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 7 | 5 | 0 |

* Pas de décès. — No deaths. *a* Tuberculose, toutes formes. — Tuberculosis, all forms. *b* Tuberculose pulmonaire. — Pulmonary tuberculosis.

## JAPON (proprement dit) — JAPAN (exclusive of Territories)

(Population: 59 138 900. E. 31 décembre 1924.)

**Nombre de cas de maladies à déclaration obligatoire et de décès causés par ces maladies déclarés en 1920-1924; par mois en 1924.**

**Number of Cases of and Deaths from Notifiable Diseases reported in 1920-1924; by months in 1924.**

*Source:* Revue sanitaire du Département de l'Intérieur du Japon. — Sanitary Review of the Home Department of Japan.

| Maladie — Disease | | | Total 1920 | Total 1921 | Total 1922 | Total 1923 | Total 1924 | Jan. Jan. | Fév. Feb. | Mars Mar. | Avril April | Mai May | Juin June | Juil. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Diphtérie | Diphtheria | C. | 15173 | 14522 | 13737 | 12776 | 13109 | 1328 | 1341 | 1538 | 1299 | 1053 | 830 | 557 | 414 | 689 | 1082 | 1341 | 1637 |
| | | D. | 3439 | 3501 | 3254 | 3111 | 3175 | 335 | 337 | 398 | 304 | 243 | 207 | 126 | 110 | 131 | 213 | 313 | 458 |
| Dysenterie | Dysentery | C. | 12738 | 12445 | 15134 | 20270 | 18647 | 153 | 161 | 192 | 265 | 577 | 1477 | 3721 | 4775 | 4108 | 2224 | 689 | 305 |
| | | D. | 2961 | 2941 | 3975 | 7372 | 7232 | 73 | 78 | 77 | 110 | 239 | 568 | 1350 | 1663 | 1548 | 917 | 344 | 265 |
| Fièvre paratyphoïde | Paratyphoid fever | C. | 7734 | 6291 | 7118 | 5317 | 5378 | 200 | 185 | 161 | 132 | 357 | 401 | 726 | 1126 | 842 | 676 | 330 | 242 |
| | | D. | 850 | 802 | 835 | 690 | 634 | 29 | 34 | 20 | 19 | 24 | 52 | 73 | 86 | 87 | 81 | 62 | 67 |
| Fièvre typhoïde | Typhoid fever | C. | 53925 | 50133 | 52419 | 52636 | 58354 | 3752 | 3509 | 2874 | 2581 | 3265 | 4378 | 6351 | 8462 | 8042 | 6228 | 4323 | 4589 |
| | | D. | 10327 | 10634 | 11218 | 11371 | 12595 | 766 | 951 | 779 | 629 | 681 | 757 | 1086 | 1666 | 1584 | 1390 | 1121 | 1185 |
| Méningite cérébro-spin. | Cerebro-spinal meningitis | C. | 951 | 772 | 935 | 708 | 1348 | 35 | 42 | 56 | 61 | 38 | 40 | 25 | 641 | 301 | 65 | 16 | 28 |
| | | D. | 491 | 413 | 544 | 374 | 849 | 19 | 24 | 30 | 19 | 29 | 13 | 22 | 394 | 204 | 47 | 17 | 40 |
| Peste | Plague | C. | 22 | 2 | 118 | 1 | 7 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 1 | 2 | 0 | 0 |
| | | D. | 16 | 0 | 89 | 1 | 6 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 1 | 2 | 0 | 0 |
| Scarlatine | Scarlet fever | C. | 1368 | 1589 | 1657 | 1562 | 1843 | 133 | 149 | 169 | 188 | 195 | 185 | 115 | 72 | 97 | 156 | 149 | 235 |
| | | D. | 90 | 82 | 97 | 88 | 121 | 12 | 3 | 7 | 12 | 22 | 12 | 5 | 4 | 4 | 8 | 9 | 23 |
| Typhus exanth. | Typhus | C. | 66 | 171 | 23 | 14 | 14 | 0 | 0 | 0 | 0 | 1 | 5 | 2 | 3 | 1 | 1 | 0 | 1 |
| | | D. | 3 | 22 | 7 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
| Variole | Smallpox | C. | 3167 | 889 | 679 | 1922 | 1702 | 462 | 451 | 282 | 297 | 83 | 67 | 51 | 1 | 2 | 1 | 0 | 5 |
| | | D. | 844 | 212 | 124 | 381 | 266 | 59 | 76 | 44 | 50 | 17 | 9 | 9 | 2 | 0 | 0 | 0 | 0 |

| | | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|
| Choléra asiatique — Asiatic cholera | C. | 4985 | 29 | 743 | 4 | 0 |
| | D. | 3121 | 16 | 427 | 2 | 0 |

## JAPON

**Cas et cas suspects de méningite cérébro-spinale épidémique et cas d'une maladie épidémique du système nerveux central ressemblant à l'encéphalite léthargique.**

**Cases and Suspected Cases of Epidemic Cerebro-spinal Meningitis and Cases of an Epidemic Disease of the Central Nervous System resembling Encephalitis Lethargica.**

| Maladie — Disease | | Août — August | | | Septembre — September | | | | Octobre — October | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 10-16 | 17-23 | 24-30 | 31 VIII-6 | 7-13 | 14-20 | 21-27 | 28 IX-4 | 5-11 | 12-18 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | 199 | 250 | 288 | 217 | 122 | 113 | 124 | 59 | 18 | 8 |
| Cas suspects de méningite céréb.-spin. | Suspected cases of cereb.-spin. mening. | 0 | 22 | 121 | 447 | 451 | 285 | 159 | 64 | 43 | 27 |
| Maladie épidémique ressemblant à l'encéphal. létharg. | Epidemic disease resembling encephalitis lethargica | 4274 | | | 1609 | | 668 | | | | |

## MALAISIE (Etats fédérés) — MALAY STATES (Federated)

(Population: 1 324 890. R. 24 avril 1921.)

**Nombre de cas de certaines maladies et de décès dus à ces maladies déclarés en 1921-1924; par périodes de quatre semaines en 1924.**

**Number of Cases of and Deaths from Certain Diseases reported in 1921-1924; by four-week periods in 1924.**

*Source:* Rapports du Ministère britannique de Santé. — Reports from British Ministry of Health.

| Maladie — Disease | | | Total 1921 | Total 1922 | Total 1923 | Total 1924 | Période de quatre semaines finissant le: — Four-week period ending: Janv. Jan. 25 | Févr. Feb. 22 | Mars Mar. 21 | Avril Apr. 19 | Mai May 17 | Juin June 14 | Juil. July 11 | Août Aug. 8 | Sept. Sept. 5 | Oct. Oct. 3 | Oct. Oct. 31 | Nov. Nov. 28 | Déc. Dec. 26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Choléra asiatique | Asiatic cholera | C. | 0 | 0 | 0 | 21 | 8 | 0 | 0 | 0 | 0 | 9 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | D. | 0 | 0 | 0 | 12 | 6 | 0 | 0 | 0 | 0 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| Peste | Plague | C. | 0 | 1 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | D. | 0 | 1 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Typhus exanthém. | Typhus | C. | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 5 | 1 | 0 |
| | | D. | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Variole | Smallpox | C. | 76 | 16 | 32 | 6 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 |
| | | D. | 0 | 2 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Grippe: 1.784 cas et 51 décès en 1921; 1.653 cas et 46 décès en 1922; 2.219 cas et 80 décès en 1923. — Influenza: 1,784 cases and 51 deaths in 1921; 1,653 cases and 46 deaths in 1922; 2,219 cases and 80 deaths in 1923.

## MALAISIE (non fédérée) — MALAY STATES (Unfederated)

### JOHORE

(Population: 1 149 395. R. 24 avril 1921.)

**Nombre de décès dus à la dysenterie, à la grippe et à la pneumonie déclarés en 1922-1924; par périodes de quatre semaines en 1924.**
**Number of Deaths from Dysentery, Influenza, and Pneumonia reported in 1922-1924; by four-week periods in 1924.**

*Source:* Rapports du Ministère britannique de Santé. — Reports from British Ministry of Health.

| Cause de décès / Cause of Death | Total 1922 | Total 1923 | Total 1924 | Période de quatre semaines finissant le: — Four-week period ending: Janv. Jan. 26 | Fév. Feb. 23 | Mars March 22 | Avril April 19 | Mai May 17 | Juin June 14 | Juillet July 12 | Août August 9 | Sept. Sept. 6 | Octob. Oct. 4 | Nov. Nov. 1 | Nov. Nov. 29 | Déc. Dec. 27 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dysenterie Dysentery | 0 | 156 | 148 | 7 | 14 | 11 | 10 | 9 | 5 | 17 | 7 | 10 | 13 | 14 | 19 | 12 |
| Grippe Influenza | 72 | 24 | 4 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Pneumonie Pneumonia | 0 | 204 | 236 | 11 | 17 | 24 | 21 | 15 | 26 | 12 | 21 | 18 | 17 | 24 | 14 | 16 |

Données reçues relatives à quelques autres maladies: — Data received for certain other diseases:

| | | | 1922 | 1923 | | | | 1922 | 1923 |
|---|---|---|---|---|---|---|---|---|---|
| Ankylostomiase | Ankylostomiasis | C. | — | 1486 | Peste | Plague | C. | — | 4 |
| | | D. | — | 52 | | | D. | — | 3 |
| Béri-béri | Beri-beri | C. | — | 364 | Pneumonie grippale | Influenzal pneumonia | C. | — | 21 |
| | | D. | 318 | 83 | | | D. | — | 3 |
| Fièvre hématurique | Blackwater fever | C. | — | 16 | Rougeole | Measles | C. | — | 46 |
| | | D. | — | 8 | | | D. | — | 1 |
| Fièvre paludéenne | Malarial fever | D. | — | 3687 | Tuberculose pulmonaire | Phthisis | C. | — | 501 |
| Fièvre typhoïde | Enteric fever | C. | — | 10 | | | D. | — | 207 |
| | | D. | 4 | 8 | Varicelle | Chickenpox | C. | — | 7 |
| Méningite cérébro-spinale | Cerebro-spinal fever | C. | — | 9 | Variole | Smallpox | C. | 87 | 1 |
| | | D. | 20 | 6 | | | D. | 6 | 0 |

### KEDAH

(Population: 338 554. R. 1921.)

**Nombre de cas et de décès de variole et de décès dus à la dysenterie, à la grippe et à la pneumonie constatés en 1923 et 1924; par périodes de quatre semaines en 1924.**
**Number of Cases of and Deaths from Smallpox and of Deaths from Dysentery, Influenza and Pneumonia reported in 1923 and 1924; by four week periods in 1924.**

*Source:* Rapports du Ministère britannique de Santé. — Reports from British Ministry of Health.

| Maladie — Disease | | | Total 1923 | Total 1924 | Période de quatre semaines finissant le: — Four-week period ending: Janv. Jan. 26 | Fév. Febr. 23 | Mars March 22 | Avril April 19 | Mai May 17 | Juin June 14 | Juillet July 12 | Août Aug. 9 | Sept. Sept. 6 | Oct. Oct. 4 | Nov. Nov. 1 | Nov. Nov. 29 | Déc. Dec. 27 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dysenterie | Dysentery | D. | 155 | 217 | 18 | 7 | 15 | 11 | 18 | 16 | 22 | 13 | 20 | 19 | 19 | 23 | 16 |
| Grippe | Influenza | D. | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pneumonie | Pneumonia | D. | 100 | 127 | 6 | 9 | 8 | 6 | 6 | 2 | 10 | 14 | 7 | 12 | 13 | 18 | 16 |
| Typhus exant. | Typhus | C. | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | | D. | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Variole | Smallpox | C. | 3 | 23 | 1 | 0 | 0 | 0 | 11 | 5 | 4 | 1 | 0 | 0 | 1 | 0 | 0 |
| | | D. | 0 | 3 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |

### KELANTAN

(Population: 309 293. R. 1921.)

| | Choléra asiatique Asiatic cholera | | Dysenterie Dysentery | Pneumonie Pneumonia | Typhus exanthém. Typhus | | Variole Smallpox | |
|---|---|---|---|---|---|---|---|---|
| | C. | D. | D. | D. | C. | D. | C. | D. |
| 1923 | 29 | 24 | 2 | 12 | 2 | 2 | 2 | 0 |
| 1924 | 1 | 0 | 1 | 22 | 0 | 0 | 0 | 0 |

## PALESTINE

(Population: 757 182. R. 23 oct. 1922.)

**Nombre de cas de maladies à déclaration obligatoire et de décès causés par ces maladies déclarés en 1921-1924; par mois en 1924.**

**Number of Cases of and Deaths from Notifiable Diseases reported in 1921-1924; by months in 1924.**

*Source:* Rapports du Service de Santé. — Reports from the Department of Health.

| Maladie — Disease | | | Total 1921 | Total 1922 | Total 1923 | Total 1924 | Janv. Jan. | Févr. Feb. | Mars March | Avril April | Mai May | Juin June | Juil. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Diphtérie | Diphtheria | C. | 35 | 83 | 39 | 25 | 5 | 2 | 1 | 2 | 0 | 2 | 2 | 0 | 1 | 4 | 3 | 3 |
| | | D. | 1 | 7 | 7 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fièvre récurrente | Relapsing fever | C. | 51 | 25 | 8 | 11 | 1 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 3 | 0 | 2 | 2 |
| Fièvre paratyph | Paratyph. fever | C. | 91 | 63 | 77 | | | | | | | | | | | | | |
| | | D. | 3 | 5 | 8 | 302 | 9 | 22 | 12 | 6 | 13 | 32 | 33 | 35 | 47 | 46 | 28 | 19 |
| Fièvre typhoïde | Typhoid fever | C. | 368 | 208 | 202 | 31 | 2 | 1 | 4 | 0 | 1 | 1 | 3 | 3 | 9 | 3 | 3 | 1 |
| | | D. | 34 | 32 | 17 | | | | | | | | | | | | | |
| Grippe | Influenza | C. | 2381 | 209 | 275 | 861 | 46 | 37 | 8 | 7 | 3 | 3 | 0 | 1 | 0 | 1 | 32 | 723 |
| | | D. | 196 | 14 | 15 | 26 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 20 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | C. | 15 | 23 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 |
| | | D. | 10 | 19 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| Peste | Plague | C. | 4 | 64 | 15 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 |
| | | D. | 1 | 19 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Pneumonie | Pneumonia | C. | 705 | 626 | 1860 | 703 | 98 | 69 | 48 | 62 | 46 | 47 | 37 | 28 | 33 | 44 | 53 | 138 |
| | | D. | 366 | 313 | 505 | 443 | 63 | 44 | 34 | 36 | 34 | 35 | 23 | 16 | 21 | 30 | 27 | 80 |
| Poliomyélite | Poliomyelitis | C. | — | — | — | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 |
| Scarlatine | Scarlet fever | C. | 115 | 83 | 13 | 7 | 1 | 1 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 |
| | | D. | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Typhus exanth. | Typhus | C. | 63 | 33 | 35 | 38 | 2 | 3 | 1 | 3 | 1 | 1 | 5 | 9 | 4 | 3 | 3 | 3 |
| | | D. | 6 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Variole | Smallpox | C. | 2 | 159 | 9 | 23 | 3 | 1 | 0 | 0 | 2 | 17 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | D. | 2 | 16 | 5 | 2 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Autres maladies déclarées — Other diseases reported:

| | Coqueluche Whooping-cough | | Dysenterie Dysentery | | Erysipèle Erysipelas | | Fièvre puerpérale Puerperal fever | | Leichmaniose Leichmaniasis | Lèpre Leprosy | Oreillons Mumps | Rage humaine Rabies | Rougeole Measles | | Rubéole German measles | Schistosomiase Schistosomiasis | Ulcère épidémique Epidemic ulcer | Varicelle Chickenpox | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | C. | D. | C. | D. | C. | D. | C. | D. | C. | C. | C. | D. | C. | D. | C. | C. | C. | C. | D. |
| 1921 . . . . | 131 | 6 | 100 | 6 | 114 | 9 | 15 | 10 | 0 | *a* 34 | 535 | — | 13 | 1 | 6 | — | — | 85 | 0 |
| 1922 . . . . | 193 | 13 | 129 | 11 | 102 | 9 | 26 | 15 | 0 | 10 | 175 | — | 117 | 10 | 4 | 49 | — | 80 | 1 |
| 1923 . . . . | 268 | 18 | 234 | 16 | 114 | 6 | 19 | 8 | 2 | 10 | 265 | 13 | 6936 | 1232 | 1 | 26 | 396 | 140 | 0 |
| 924 . . . . | — | — | 724 | 27 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

Pas de décès de poliomyélite en 1924. — No death from poliomyelitis in 1924.

*a* Nombre de lépreux existant en 1921. — Number of lepers living in 1921.

## SIAM

(Population: 9 618 000. E. 1924.)

**Nombre de cas de maladies à déclaration obligatoire et de décès causés par ces maladies déclarés en 1921-1924; par périodes de quatre semaines en 1924.**

**Number of Cases of and Deaths from Notifiable Diseases reported in 1921-1924; by four-week periods in 1924.**

*Source:* Rapports du Service de Santé. — Reports from Department of Public Health.

| Maladie — Disease | | | Total 1921 | Total 1922 | Total 1923 | Total 1924 | Période de quatre semaines finissant le : Four-week period ending : Janv. Jan. 26. | Fév. Feb. 23 | Mars March 22 | Avril April 19 | Mai May 17 | Juin June 14 | Juil. July 12 | Août Aug. 9 | Sept. 6 | Oct. 4 | Nov 1 | Nov. 29 | Déc. Dec. 27 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Choléra asiatiq. | Asiatic cholera | C. | *a* 103 | 138 | 213 | 97 | 8 | 2 | 7 | 8 | 14 | 35 | 8 | 3 | 3 | 3 | 2 | 4 | 0 |
| | | D. | 42 | 80 | 108 | 61 | 5 | 0 | 3 | 3 | 11 | 25 | 4 | 3 | 0 | 3 | 2 | 2 | 0 |
| Méningite cérébro-spin. | Cerebro-spinal meningitis | C. | — | 0 | 67 | 15 | 2 | 1 | 2 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 3 |
| | | D. | — | 0 | 25 | 7 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 |
| Peste | Plague | C. | 130 | 196 | 397 | 93 | 17 | 4 | 9 | 0 | 2 | 9 | 6 | 7 | 10 | 8 | 10 | 5 | 6 |
| | | D. | 103 | 164 | 329 | 67 | 12 | 4 | 8 | 0 | 2 | 4 | 2 | 6 | 9 | 5 | 8 | 4 | 3 |
| Variole | Smallpox | C. | *b* 404 | 472 | 1451 | 588 | 101 | 67 | 140 | 100 | 68 | 46 | 26 | 7 | 25 | 1 | 0 | 1 | 6 |
| | | D. | *b* 102 | 117 | 743 | 173 | 21 | 28 | 31 | 31 | 20 | 17 | 12 | 4 | 5 | 4 | 0 | 0 | 0 |

*a* Pour le premier trimestre, les données ne concernent que la ville de Bangkok. — For the first quarter, data are given for the town of Bangkok only.

*b* Total, d'après le calendrier siamois, pour l'année commençant le 1er avril et finissant le 31 mars. — Total for year as per Siamese calendar, commencing April 1st and ending March 31st.

## SINGAPOUR, PENANG ET MALACCA — SINGAPORE, PENANG, MALACCA

(Population: 785 337. E. 1923.)

**Nombre de cas et de décès causés par certaines maladies infectieuses en 1923 et 1924; par périodes de quatre semaines en 1924.**
**Number of Deaths from Certain Infectious Diseases in 1923 and 1924; by four-week periods in 1924.**

*Source:* Rapports du Ministère britannique de Santé. — Reports from British Ministry of Health.

| Maladie — Disease | | | Total 1923 | Total 1924 | Période de quatre semaines finissant le: — Four-week period ending: Janv. 26 Jan. 26 | Fév. 23 Feb. 23 | Mars 22 March 22 | Avril 19 April 19 | Mai 17 May 17 | Juin 14 June 14 | Juil. 12 July 12 | Août 9 Aug. 9 | Sept. 6 Sept. 6 | Oct. 4 Oct. 4 | Nov. 1 Nov. 1 | Nov. 29 Nov. 29 | Déc. 27 Dec 27 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Béri-béri | Beri-beri | D. | 813 | 845 | 54 | 62 | 65 | 60 | 58 | 61 | 78 | 72 | 73 | 71 | 61 | 59 | 71 |
| Choléra asiatique | Asiatic cholera | C. | 0 | 12 | 0 | 0 | 0 | 0 | 1 | 1 | 10 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | D. | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 1 | 8 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diphtérie | Diphtheria | C. | 16 | 6 | 1 | 0 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | D. | 10 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 1 | 0 | 0 |
| Dysenterie | Dysentery | D. | 737 | 689 | 50 | 44 | 46 | 55 | 66 | 66 | 70 | 58 | 32 | 38 | 53 | 47 | 64 |
| Fièvre typhoïde | Enteric fever | D. | 48 | 46 | 4 | 2 | 2 | 3 | 4 | 6 | 4 | 9 | 0 | 0 | 2 | 4 | 6 |
| Grippe | Influenza | D. | 161 | 157 | 12 | 9 | 15 | 12 | 13 | 15 | 8 | 11 | 13 | 21 | 8 | 10 | 10 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | C. | 14 | 19 | 0 | 1 | 0 | 3 | 3 | 5 | 3 | 2 | 1 | 1 | 0 | 0 | 0 |
| | | D. | 17 | 15 | 0 | 1 | 0 | 3 | 1 | 2 | 3 | 2 | 1 | 1 | 1 | 0 | 0 |
| Paludisme | Malaria | D. | 1367 | 1089 | 77 | 71 | 84 | 65 | 92 | 82 | 77 | 112 | 93 | 69 | 73 | 99 | 95 |
| Peste | Plague | C. | 55 | 19 | 3 | 8 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 |
| | | D. | 56 | 18 | 5 | 6 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Pneumonie | Pneumonia | D. | 1562 | 1625 | 130 | 108 | 108 | 127 | 134 | 141 | 120 | 124 | 141 | 127 | 115 | 138 | 112 |
| Tuberculose pulmonaire | Pulmonary tuberculosis | D. | 2123 | 2042 | 165 | 153 | 158 | 148 | 163 | 166 | 144 | 145 | 147 | 148 | 166 | 166 | 173 |
| Variole | Smallpox | C. | 32 | 14 | 3 | 1 | 2 | 4 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | D. | 2 | 7 | 0 | 0 | 1 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## TURQUIE — TURKEY

(Population : 8 000 000. E. 1923.)

**Nombre de cas de certaines maladies transmissibles et de décès causés par ces maladies déclarés en 1924; par mois.**
**Number of Cases of and Deaths from Certain Infectious Diseases reported in 1924; by months.**

*Source:* Rapports mensuels du Ministère de l'Hygiène et de l'Assistance publique.

| Maladie — Disease | | | Total 1924 | Janv. Jan. | Févr. Feb. | Mars March | Avril April | Mai May | Juin June | Juill. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | *b* | | | | | *a* | | | | | | | |
| Anthrax | Anthrax | C. | 10 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 10 | 0 | 0 |
| Diphtérie | Diphtheria | C. | 227 | 10 | 16 | 10 | 19 | | 12 | 14 | 30 | 26 | 25 | 35 | 30 |
| | | D. | 37 | 4 | 3 | 2 | 5 | | 6 | 2 | 5 | 5 | 0 | 3 | 2 |
| Dysenterie | Dysentery | C. | 152 | 5 | 1 | 2 | 3 | | 43 | 6 | 14 | 26 | 22 | 21 | 9 |
| | | D. | 23 | 1 | 0 | 0 | 0 | | 0 | 0 | 4 | 6 | 5 | 6 | 1 |
| Fièvre puerpérale | Puerperal fever | C. | 17 | — | — | — | — | | 3 | 2 | 4 | 2 | 0 | 3 | 3 |
| | | D. | 8 | — | — | — | — | | 2 | 1 | 1 | 1 | 0 | 1 | 2 |
| Fièvre récurrente | Relapsing fever | C. | 12 | 2 | 0 | 1 | 1 | | 4 | 0 | 0 | 3 | 1 | 0 | 0 |
| Fièvre typhoïde | Typhoid fever | C. | 600 | 34 | 27 | 24 | 25 | | 33 | 60 | 69 | 118 | 84 | 70 | 56 |
| | | D. | 32 | 1 | 2 | 3 | 3 | | 3 | 0 | 6 | 7 | 2 | 2 | 3 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | C. | 19 | 0 | 0 | 2 | 6 | | 2 | 0 | 2 | 2 | 1 | 2 | 2 |
| | | D. | 7 | 0 | 0 | 1 | 2 | | 0 | 0 | 3 | 1 | 0 | 0 | 0 |
| Peste | Plague | C. | 2 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| Rage | Rabies | C. | 10 | 0 | 0 | 0 | 0 | | 0 | 2 | 8 | 0 | 0 | 0 | 0 |
| Scarlatine | Scarlet fever | C. | 859 | 92 | 60 | 42 | 27 | | 47 | 37 | 104 | 125 | 60 | 149 | 116 |
| | | D. | 137 | 8 | 5 | 4 | 12 | | 2 | 0 | 12 | 12 | 34 | 13 | 35 |
| Tétanos | Tetanus | C. | 4 | 0 | 0 | 0 | 0 | | 1 | 1 | 1 | 0 | 1 | 0 | 0 |
| | | D. | 2 | 0 | 0 | 0 | 0 | | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| Typhus exanthémat. | Typhus | C. | 636 | 46 | 23 | 30 | 55 | | 204 | 94 | 32 | 20 | 38 | 53 | 41 |
| | | D. | 71 | 3 | 1 | 3 | 5 | | 25 | 20 | 2 | 1 | 0 | 3 | 8 |
| Variole | Smallpox | C. | 838 | 153 | 135 | 81 | 88 | | 59 | 63 | 33 | 27 | 28 | 113 | 31 |
| | | D. | 124 | 18 | 27 | 8 | 7 | | 0 | 20 | 6 | 3 | 0 | 38 | 4 |

*a*. Les données manquent. — Data are missing.
*b*. Total pour onze mois. — Total for eleven months.

# AUSTRALASIE — AUSTRALASIA

## AUSTRALIE — AUSTRALIA

(Population: 5 873 503. E. 31 déc. 1924.)

**Nombre de cas de maladies à déclaration obligatoire déclarés en 1921-1924; par semaines en 1924.**
**Number of Cases of Notifiable Diseases reported in 1921-1924; by weeks in 1924.**

*Sources:* *Health*, Journal of Commonwealth Health Department, 1923 (et — and) Medical Journal of Australia. Rapports du Directeur général de Santé. — Reports from Director-General of Department of Health

| Semaine finissant le: Week ending: | | | Diphtérie Diphtheria | Encéphal. létharg. Encephal. lethargica | Fièvre puerpérale Puerperal fever *a* | Fièvre typhoïde Enteric fever | Méningite cérébro-sp. Cerebro-sp. meningitis | Paludisme Malaria *a* | Poliomyélite aiguë Acute poliomyelitis | Scarlatine Scarlet fever | Tuberculose Tuberculosis *d* |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | | 1919 | 11858 | — | — | 2368 | 100 | — | *b* 134 | 2954 | — |
| Total | | 1920 | 16024 | — | — | 2950 | 100 | — | *b* 71 | 5180 | — |
| Total | | 1921 | 24783 | — | — | 2899 | 80 | — | *b* 140 | 6104 | — |
| Total | | 1922 | 14156 | — | — | 1936 | 69 | — | 114 | 5779 | — |
| Total | | 1923 | 9915 | 28 | — | 2336 | 61 | — | 137 | 6634 | 3580 |
| * Total | | 1924 | 10918 | 17 | 125 | 1816 | 71 | 34 | 232 | 7345 | 3803 |
| Janvier | — January | 5 | 187 | 1 | 1 | 42 | 1 | 0 | 7 | 85 | 62 |
| | | 12 | 180 | 0 | 4 | 58 | 0 | 2 | 6 | 92 | 66 |
| | | 19 | 199 | 0 | 1 | 70 | 1 | 0 | 4 | 120 | 76 |
| | | 26 | 167 | 0 | 0 | 64 | 0 | 0 | 0 | 88 | 73 |
| Février | — February | 2 | 192 | 0 | 0 | 91 | 0 | 0 | 2 | 124 | 68 |
| | | 9 | 220 | 0 | 1 | 88 | 1 | 0 | 1 | 148 | 78 |
| | | 16 | 204 | 0 | 1 | 101 | 0 | 1 | 2 | 156 | 89 |
| | | 23 | 226 | 0 | 0 | 74 | 2 | 1 | 5 | 159 | 96 |
| Mars | — March | 1 | 201 | 0 | 0 | 58 | 1 | 1 | 1 | 154 | 73 |
| | | 8 | 294 | 1 | 0 | 65 | 2 | 0 | 3 | 197 | 70 |
| | | 15 | 264 | 0 | 2 | 68 | 0 | 0 | 5 | 198 | 56 |
| | | 22 | 283 | 1 | 0 | 56 | 0 | 0 | 7 | 193 | 85 |
| | | 29 | 284 | 0 | 1 | 64 | 3 | 4 | 14 | 229 | 97 |
| Avril | — April | 5 | 404 | 0 | 3 | 66 | 1 | 0 | 2 | 275 | 99 |
| | | 12 | 351 | 0 | 4 | 61 | 2 | 0 | 4 | 251 | 75 |
| | | 19 | 239 | 0 | 2 | 45 | 0 | 0 | 6 | 155 | 45 |
| | | 26 | 355 | 0 | 2 | 52 | 2 | 0 | 6 | 240 | 48 |
| Mai | — May | 3 | 379 | 1 | 1 | 57 | 0 | 4 | 6 | 285 | 93 |
| | | 10 | 315 | 1 | 2 | 42 | 4 | 0 | 5 | 246 | 84 |
| | | 17 | 360 | 0 | 7 | 55 | 1 | 1 | 2 | 225 | 62 |
| | | 24 | 319 | 0 | 5 | 31 | 0 | 0 | 5 | 209 | 77 |
| | | 31 | 303 | 0 | 4 | 35 | 2 | 0 | 4 | 208 | 76 |
| Juin | — June | 7 | 246 | 0 | 1 | 21 | 1 | 0 | 4 | 155 | 57 |
| | | 14 | 246 | 0 | 5 | 21 | 2 | 2 | 4 | 160 | 50 |
| | | 21 | 293 | 0 | 3 | 19 | 0 | 0 | 3 | 179 | 86 |
| | | 28 | 272 | 0 | 2 | 25 | 1 | 3 | 1 | 140 | 57 |
| Juillet | — July | 5 | 211 | 2 | 1 | 28 | 1 | 0 | 2 | 147 | 63 |
| | | 12 | 164 | 1 | 4 | 13 | 4 | 0 | 3 | 128 | 76 |
| | | 19 | 181 | 0 | 3 | 9 | 2 | 0 | 8 | 116 | 86 |
| | | 26 | 196 | 0 | 4 | 12 | 1 | 0 | 3 | 121 | 64 |
| Août | — August | 2 | 170 | 0 | 2 | 11 | 3 | 0 | *c* 20 | 122 | 62 |
| | | 9 | 160 | 0 | 1 | 12 | 2 | 0 | 0 | 115 | 69 |
| | | 16 | 191 | 0 | 3 | 19 | 1 | 0 | 4 | 113 | 89 |
| | | 23 | 138 | 0 | 1 | 16 | 1 | 2 | 1 | 110 | 58 |
| | | 30 | 166 | 0 | 2 | 10 | 3 | 0 | 5 | 99 | 84 |
| Septembre | — September | 6 | 155 | 0 | 0 | 11 | 5 | 0 | 2 | 115 | 85 |
| | | 13 | 154 | 0 | 1 | 17 | 0 | 2 | 2 | 107 | 72 |
| | | 20 | 123 | 0 | 6 | 12 | 0 | 0 | 4 | 97 | 68 |
| | | 27 | 134 | 0 | 2 | 20 | 4 | 1 | 4 | 96 | 70 |
| Octobre | — October | 4 | 120 | 0 | 5 | 10 | 0 | 4 | 3 | 90 | 71 |
| | | 11 | 133 | 0 | 5 | 17 | 2 | 0 | 4 | 68 | 52 |
| | | 18 | 133 | 1 | 6 | 8 | 1 | 0 | 2 | 73 | 76 |
| | | 25 | 127 | 0 | 3 | 27 | 1 | 2 | 2 | 101 | 78 |
| Novembre | — November | 1 | 122 | 1 | 0 | 17 | 0 | 1 | 4 | 87 | 68 |
| | | 8 | 118 | 0 | 2 | 24 | 2 | 1 | 4 | 85 | 57 |
| | | 15 | 126 | 0 | 3 | 20 | 0 | 0 | 13 | 73 | 84 |
| | | 22 | 128 | 0 | 4 | 22 | 0 | 1 | 5 | 91 | 87 |
| | | 29 | 146 | 2 | 3 | 33 | 1 | 0 | 10 | 72 | 90 |
| Décembre | — December | 6 | 121 | 0 | 4 | 34 | 1 | 0 | 2 | 77 | 51 |
| | | 13 | 135 | 1 | 1 | 35 | 2 | 0 | 3 | 74 | 68 |
| | | 20 | 111 | 0 | 2 | 48 | 4 | 0 | 8 | 50 | 56 |
| | | 27 | 79 | 0 | 1 | 23 | 1 | 0 | 2 | 36 | 34 |
| 1925 Janv. | — January | 3 | 158 | 0 | 4 | 27 | 1 | 1 | 8 | 55 | 45 |

Autres maladies déclarées: — Other diseases reported:

| | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Anthrax | Anthrax | 4 | 8 | 9 | 6 | 3 | 4 | Tétanos | Tetanus | — | — | 0 | 5 | 7 | 17 |
| Lèpre | Leprosy | 9 | 12 | 12 | 10 | 14 | 18 | Typhus exanth. | Typhus | 0 | 0 | 0 | 0 | 0 | 2 |
| Peste | Plague | 0 | 0 | 106 | 46 | 1 | 0 | Variole | Smallpox | 0 | 0 | 8 | 0 | 0 | 0 |

*a* Total pour cinq Etats seulement; les données pour la Nouvelle Galles du Sud manquent. — Total for five States only; data for New South Wales are not available.

*b* Total pour cinq Etats seulement; les données pour l'Australie du Sud manquent. — Total for five States only; data for South Australia are not available.

*c* 18 de ces cas se sont produits au cours d'une période de plusieurs mois. — 18 of these cases have occurred over a period of several months.

* 53 semaines. — 53 weeks.

*d* Phtisie ; à déclaration obligatoire seulement dans une partie de la Nouvelle-Galles du Sud ayant une population d'environ 1 300 000 habitants. — Phthisis ; notifiable only in portion of New South Wales (approximate population 1 300 000).

N.B. Les données hebdomadaires sont provisoires ; les totaux annuels sont définitifs. — Weekly figures are provisional; annual totals are final.

## AUSTRALIE — AUSTRALIA

(Population: 5 873 503. E. 31 déc. 1924.)

**Nombre de cas de maladies à déclaration obligatoire déclarés dans les Etats d'Australie en 1920-1924.**
**Number of Cases of Notifiable Diseases reported in the States of Australia in 1920-1924.**

*Sources: Health*, Journal of Health Department, 1923. Medical Journal of Australia, 1922-1923; (pour 1921-1922 — for 1921-1922). Rapports du Ministère britannique de Santé pour les années 1920-1922. — Rapports du Directeur général du Service de Santé. — Reports from the British Ministry of Health for years 1920-1922. — Reports from Director-General of Department of Health.

| Maladie — Disease | | 1920 | 1921 | 1922 | 1923 | 1924* | 1920 | 1921 | 1922 | 1923 | 1924* | 1920 | 1921 | 1922 | 1923 | 1924* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Queensland *f* (Population: 841 772. E. 31 déc. 1924) | | | | | Victoria (Population: 1 657 095. E. 31 déc. 1924) | | | | | Australie occidentale Western Australia (Population: 364 124. E. 31 déc. 1924) | | | | |
| Choléra asiatiq. | Asiatic cholera | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Peste | Plague | 0 | 103 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ankylostomiase | Ankylostomiasis | 5 | 89 | 107 | — | — | — | 0 | 0 | — | — | — | 1 | — | — | — |
| Anthrax | Anthrax | 0 | 1 | 0 | — | 0 | 1 | 2 | 1 | 2 | 1 | — | — | 0 | — | 0 |
| Béri-béri | Beri-beri | — | — | — | — | — | — | — | — | — | — | 63 | 21 | 33 | 19 | 30 |
| Bilharzia | Bilharzia | 1 | 1 | 1 | — | — | — | 0 | 0 | — | — | — | 0 | 1 | — | — |
| Dengue | Dengue | — | — | — | — | — | — | — | — | — | — | 38 | 27 | 16 | 3 | 0 |
| Diphtérie | Diphtheria | 1117 | 2423 | 1275 | 1066 | 1103 | 6458 | 9458 | 5025 | 3142 | 3608 | 1080 | 1020 | 584 | 494 | 541 |
| Dysenterie | Dysentery | — | 11 | 0 | 3 | 3 | — | 6 | 2 | 7 | 20 | 49 | 21 | 10 | 6 | 15 |
| Encéphalite let. | Encephalitis leth. | — | — | — | 0 | 0 | — | 2 | 18 | 21 | 13 | — | — | — | 1 | 0 |
| Erysipèle | Erysipelas | 121 | 100 | 124 | 102 | 143 | — | — | — | — | — | 38 | 56 | 41 | 38 | 52 |
| Fièvre continue | Continued fever | 1 | 0 | 0 | 0 | | — | 0 | 0 | — | | 1 | 2 | 1 | — | |
| Fièvre puerp. | Puerperal fever | 26 | 30 | 28 | 20 | 27 | — | 52 | 61 | 40 | 45 | — | 13 | 4 | 8 | 13 |
| Fièvre typhoïde | Enteric fever | 702 | 468 | 400 | 516 | 501 | 433 | 532 | 294 | 410 | 288 | 387 | 391 | 244 | 261 | 231 |
| Grippe | Influenza | *a* 18802 | 274 | 9 | — | — | — | — | — | — | — | *b* 227 | 19 | 1 | 3 | — |
| Lèpre | Leprosy | | | | | 0 | | | | | 0 | | | | 1 | 1 |
| Méningite céréb.-spin. | Cerebro-spinal meningitis | 32 | 19 | 22 | 9 | 14 | — | 20 | 13 | 8 | 21 | 3 | 0 | 0 | 2 | 4 |
| Paludisme | Malaria | 9 | 4 | 17 | 2 | 5 | — | 7 | 5 | 4 | 0 | 57 | 38 | 40 | 24 | 28 |
| Poliomyélite | Poliomyelitis | 17 | 28 | 11 | 1 | 116 | — | 21 | 22 | 7 | 12 | 8 | 1 | 0 | 8 | 2 |
| Scarlatine | Scarlet fever | 340 | 381 | 215 | 311 | 393 | 2259 | 2816 | 1889 | 1572 | 2142 | 468 | 234 | 97 | 58 | 70 |
| Tétanos | Tetanus | — | — | — | — | — | — | — | 5 | 6 | — | — | — | — | 1 | — |
| Tuberculose pulmonaire | Pulmonary tuberculosis | *a* 374 | 619 | 450 | 393 | 356 | — | 1171 | 1098 | 987 | 968 | *e* 442 | 449 | 388 | 362 | 428 |
| Variole | Smallpox | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | — | 0 | 0 | 0 | 0 |
| Maladies vénériennes | Venereal diseases | — | — | — | — | — | — | — | — | — | — | 983 | 1125 | 727 | — | — |
| Chancre mou | Soft chancre | 151 | *d* 77 | *d* 40 | *d* 24 | — | — | — | — | — | — | — | — | — | — | — |
| Gonorrhée | Gonorrhœa | 2254 | *d* 1944 | *d* 1581 | *d* 1508 | — | — | — | — | — | — | — | — | — | — | — |
| Syphilis prim. | Prim. syphilis | 351 | *d* 241 | *d* 154 | *d* 141 | — | — | — | — | — | — | — | — | — | — | — |
| Syphilis second. | Second. syphilis | 79 | *d* 32 | *d* 20 | *d* 13 | — | — | — | — | — | — | — | — | — | — | — |
| | | Nouvelles Galles du Sud New South Wales (Population: 2 172 227) | | | | | Australie du Sud Southern Australia (Population: 513 410) | | | | | Tasmanie *f* Tasmania *f* Population: 219 021) | | | | |
| Choléra asiatiq. | Asiatic cholera | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Peste | Plague | 0 | 2 | 33 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Anthrax | Anthrax | 7 | 6 | 5 | — | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bilharzia | Bilharzia | — | — | — | — | — | — | — | — | — | — | — | 1 | 0 | 0 | — |
| Coqueluche | Whooping-cough | — | — | — | — | — | — | 391 | 54 | 930 | 1783 | — | — | — | — | — |
| Diphtérie | Diphtheria | 5042 | 6916 | 4128 | 3499 | 4376 | 1426 | 2763 | 1508 | 844 | 662 | 901 | 2203 | 1636 | 870 | 593 |
| Encéphalite léthargique | Encephalitis lethargica | — | — | — | 0 | 0 | — | — | — | 0 | 0 | 2 | 1 | — | 1 | 0 |
| Erysipèle | Erysipelas | — | — | — | — | — | — | 121 | 108 | 102 | 91 | — | — | — | — | 0 |
| Fièvre puerp. | Puerperal fever | — | — | — | — | — | — | 21 | 16 | 30 | 26 | 14 | 22 | 16 | 11 | 14 |
| Fièvre typh. | Enteric fever | 1016 | 949 | 718 | 879 | 770 | 176 | 251 | 143 | 121 | 93 | 236 | 308 | 137 | 90 | 81 |
| Grippe | Influenza | — | — | — | — | — | — | 414 | 36 | 1133 | 435 | *b* 898 | — | — | — | — |
| Méningite cérébrospin. | Cerebro-spinal meningitis | 34 | 33 | 22 | 28 | 28 | — | 6 | 6 | 6 | 2 | 6 | 2 | 6 | 8 | 1 |
| Paludisme | Malaria | — | — | — | — | — | — | 1 | 2 | 0 | 1 | 5 | 2 | 0 | 0 | 0 |
| Poliomyélite | Poliomyelitis | 45 | 88 | 31 | 104 | 104 | — | — | 47 | 17 | 0 | 1 | 2 | 3 | 0 | 3 |
| Rougeole | Measles | — | — | — | — | — | — | 4498 | 555 | 1037 | 164 | — | — | — | — | — |
| Scarlatine | Scarlet fever | 937 | 1060 | 1162 | 2635 | 3420 | 1142 | 1245 | 1421 | 1296 | 789 | 34 | 368 | 995 | 597 | 373 |
| Tuberculose pulmonaire | Pulmonary tuberculosis | 1509 | *c* 1235 | *c* 1117 | *c* 1198 | 1257 | — | 499 | 492 | 481 | 556 | *a* 204 | 241 | 170 | 159 | 226 |
| Varicelle | Chickenpox | — | — | — | — | — | — | — | 448 | 320 | 657 | — | — | — | — | — |
| Variole | Smallpox | 0 | 0 | 0 | 0 | 0 | — | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chancre mou | Soft chancre | — | 288 | 155 | — | — | — | — | — | — | — | 15 | 24 | 36 | — | — |
| Gonorrhée | Gonorrhœa | — | 6992 | 4850 | — | — | — | — | — | — | — | 378 | 290 | 316 | — | — |
| Syphilis | Syphilis | — | 2055 | 1270 | — | — | — | — | — | — | — | 95 | 105 | 121 | — | — |

644 cas de goitre reportés dans l'état de Tasmanie. — 644 cases of goitre reported from Tasmania.

*a* Déclarés sous le nom de phtisie. — Reported as phthisis.
*b* Déclarés sous le nom d'influenza pneumonique. — Reported as pneumonic influenza.
*c* Données pour tuberculose toutes formes; à déclaration obligatoire seulement dans une partie de l'Etat. — Data given for tuberculosis, all forms; notifiable only in portion of the State.
*d* Données pour l'année finissant le 30 juin — Data for year ending June 30th.
*e* Données pour tuberculose toutes formes. — Data given for tuberculosis all forms.
*f* Les données pour l'année 1920 pour le Queensland et la Tasmanie concernent l'année finissant le 30 juin de l'année désignée au haut du tableau. — For Queensland and Tasmania for year 1920, the data are for year ending June 30th of year designated.
* 53 semaines. — 53 weeks.

## NOUVELLE-ZÉLANDE — NEW ZEALAND

(Population: 1 394 000. E. 31 mars 1924.)

**Nombre de cas et de décès dus aux maladies à déclaration obligatoire déclarés en 1919-1924 ; par semaine en 1924.**

**Number of Cases of and Deaths from Notifiable Diseases reported in 1919-1924 ; by weeks in 1924.**

*Source:* Rapports hebdomadaires du Directeur général du Service de Santé et Rapports annuels. — Weekly Reports from Director-General of Department of Health and Annual Reports.

| Semaine finissant le: / Week ending: | Diphtérie / Diphtheria | | Encéphalite léthargique / Encephalitis lethargica *a* | | Erysipèle / Erisypelas | | Fièvre typhoïde et paratyphoïde / Enteric fever | | Grippe pulmonaire, fulminante et septicém. Pneumonic, fulminant a. septicæmic influenza *b* | | Méningite cérébro-spinale / Cerebro-spinal meningitis | | Pneumonie primaire aiguë / Acute primary pneumonia | | Poliomyélite / Polio-myelitis | | Scarlatine / Scarlet fever | | Septicémie puerpérale / Puerperal septicæmia | | Tuberculose / Tuberculosis | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. |
| Total 1919 | 3499 | 149 | 90 | 29 | 73 | 7 | 477 | 34 | | | 96 | 40 | 879 | 401 | 11 | 1 | 1521 | 23 | 79 | 52 | 984 | 762 |
| Total 1920 | 2442 | 91 | 42 | 19 | 156 | 5 | 389 | 40 | *c*470 | *c*480 | 79 | 34 | 1933 | 528 | 76 | 2 | 1248 | 15 | 124 | 67 | 1305 | 851 |
| Total 1921 | 2611 | 103 | 23 | 14 | 228 | 5 | 451 | 24 | 295 | 105 | 56 | 23 | 1029 | 427 | 267 | 9 | 1845 | 24 | 178 | 48 | 1207 | 793 |
| Total 1922 | 1989 | 78 | 36 | 13 | 271 | 13 | 539 | 67 | 216 | 66 | 42 | 23 | 946 | 407 | 98 | 9 | 1449 | 10 | 262 | 52 | 1129 | 821 |
| Total 1923 | 1936 | 66 | 41 | 11 | 214 | 9 | 275 | 29 | 1155 | 222 | 36 | 14 | 782 | 243 | 16 | 1 | 1208 | 9 | 177 | 40 | 1005 | 507 |
| Total 1924 | 2708 | 59 | 29 | 10 | 212 | 4 | 388 | 39 | 182 | 28 | 30 | 13 | 757 | 211 | 58 | 11 | 1167 | 13 | 302 | 29 | 1071 | 467 |
| Janvier — 7 | 23 | 1 | 0 | 0 | 4 | 0 | 2 | 1 | 1 | 1 | 0 | 0 | 12 | 4 | 0 | 0 | 18 | 0 | 0 | 1 | 17 | 10 |
| January 14 | 28 | 0 | 1 | 0 | 2 | 1 | 10 | 0 | 0 | 1 | 0 | 0 | 9 | 1 | 0 | 0 | 15 | 0 | 3 | 1 | 21 | 2 |
| 21 | 40 | 0 | 0 | 1 | 5 | 0 | 12 | 0 | 3 | 0 | 2 | 0 | 7 | 2 | 1 | 0 | 13 | 0 | 2 | 0 | 22 | 14 |
| 28 | 28 | 0 | 0 | 0 | 1 | 1 | 7 | 0 | 1 | 0 | 1 | 2 | 6 | 2 | 0 | 0 | 12 | 1 | 0 | 0 | 14 | 7 |
| Février — 4 | 33 | 0 | 1 | 0 | 2 | 0 | 15 | 1 | 3 | 0 | 2 | 1 | 8 | 2 | 1 | 0 | 23 | 0 | 2 | 0 | 15 | 6 |
| February 11 | 33 | 0 | 1 | 1 | 2 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 6 | 2 | 1 | 0 | 21 | 0 | 1 | 0 | 20 | 10 |
| 18 | 28 | 0 | 1 | 1 | 2 | 0 | 10 | 2 | 1 | 0 | 0 | 0 | 11 | 2 | 0 | 0 | 24 | 0 | 5 | 0 | 18 | 6 |
| 25 | 21 | 1 | 0 | 1 | 2 | 0 | 8 | 0 | 0 | 1 | 1 | 1 | 7 | 0 | 1 | 1 | 36 | 0 | 5 | 0 | 31 | 7 |
| Mars — 3 | 31 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 1 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 14 | 0 | 4 | 0 | 24 | 6 |
| March 10 | 51 | 3 | 0 | 0 | 3 | 1 | 17 | 3 | 2 | 0 | 0 | 0 | 6 | 1 | 0 | 0 | 30 | 1 | 9 | 1 | 17 | 8 |
| 17 | 41 | 0 | 0 | 0 | 5 | 0 | 11 | 1 | 3 | 0 | 1 | 0 | 8 | 3 | 0 | 0 | 20 | 1 | 7 | 0 | 18 | 5 |
| 24 | 41 | 0 | 0 | 0 | 2 | 0 | 12 | 0 | 1 | 0 | 1 | 0 | 10 | 1 | 0 | 0 | 19 | 0 | 9 | 1 | 23 | 9 |
| 31 | 44 | 1 | 2 | 0 | 2 | 0 | 11 | 1 | 0 | 0 | 1 | 1 | 4 | 3 | 0 | 0 | 14 | 0 | 8 | 0 | 17 | 7 |
| Avril — 7 | 45 | 1 | 1 | 0 | 8 | 0 | 44 | 8 | 0 | 0 | 0 | 0 | 8 | 1 | 0 | 0 | 15 | 0 | 7 | 1 | 24 | 9 |
| April 14 | 60 | 0 | 0 | 0 | 4 | 0 | 4 | 1 | 6 | 0 | 2 | 0 | 3 | 1 | 0 | 0 | 28 | 0 | 5 | 1 | 14 | 10 |
| 21 | 62 | 1 | 1 | 1 | 3 | 0 | 13 | 0 | 2 | 0 | 0 | 0 | 5 | 4 | 0 | 0 | 25 | 0 | 5 | 0 | 16 | 6 |
| 28 | 62 | 0 | 1 | 0 | 3 | 0 | 5 | 1 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 26 | 0 | 5 | 0 | 9 | 12 |
| Mai — 5 | 86 | 0 | 0 | 0 | 6 | 0 | 9 | 0 | 0 | 0 | 1 | 1 | 4 | 1 | 0 | 0 | 37 | 0 | 7 | 1 | 15 | 10 |
| May 12 | 65 | 1 | 0 | 0 | 5 | 0 | 12 | 0 | 4 | 0 | 1 | 0 | 6 | 1 | 0 | 0 | 26 | 0 | 7 | 0 | 24 | 11 |
| 19 | 88 | 4 | 0 | 0 | 5 | 0 | 13 | 0 | 6 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 26 | 1 | 4 | 2 | 27 | 12 |
| 26 | 105 | 2 | 1 | 0 | 1 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 16 | 2 | 0 | 0 | 33 | 1 | 3 | 0 | 14 | 6 |
| Juin — 2 | 71 | 2 | 0 | 0 | 5 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 8 | 6 | 0 | 0 | 22 | 0 | 11 | 0 | 18 | 6 |
| June 9 | 71 | 3 | 2 | 0 | 7 | 0 | 5 | 1 | 1 | 0 | 1 | 0 | 13 | 5 | 0 | 0 | 17 | 0 | 2 | 0 | 7 | 6 |
| 16 | 82 | 1 | 0 | 1 | 3 | 0 | 5 | 1 | 1 | 0 | 0 | 0 | 8 | 3 | 1 | 0 | 31 | 0 | 5 | 0 | 17 | 6 |
| 23 | 84 | 0 | 0 | 0 | 6 | 0 | 5 | 0 | 2 | 0 | 0 | 0 | 8 | 4 | 1 | 0 | 27 | 0 | 8 | 1 | 21 | 15 |
| 30 | 93 | 1 | 0 | 0 | 3 | 0 | 5 | 1 | 2 | 1 | 1 | 0 | 22 | 5 | 1 | 0 | 25 | 0 | 8 | 0 | 17 | 9 |
| Juillet — 7 | 58 | 3 | 0 | 0 | 8 | 0 | 10 | 1 | 1 | 1 | 0 | 0 | 11 | 9 | 0 | 0 | 26 | 1 | 4 | 2 | 17 | 4 |
| July 14 | 84 | 4 | 0 | 0 | 6 | 0 | 4 | 2 | 2 | 0 | 0 | 1 | 18 | 1 | 1 | 0 | 34 | 0 | 10 | 0 | 25 | 18 |
| 21 | 97 | 2 | 0 | 0 | 5 | 0 | 5 | 1 | 6 | 0 | 0 | 0 | 26 | 4 | 0 | 0 | 29 | 0 | 5 | 1 | 23 | 9 |
| 28 | 74 | 3 | 1 | 0 | 4 | 0 | 1 | 0 | 4 | 1 | 0 | 0 | 24 | 11 | 0 | 0 | 23 | 1 | 9 | 0 | 20 | 12 |
| Août — 4 | 70 | 1 | 1 | 1 | 2 | 1 | 7 | 1 | 5 | 1 | 0 | 0 | 32 | 12 | 0 | 0 | 41 | 0 | 11 | 2 | 23 | 14 |
| August 11 | 59 | 3 | 1 | 0 | 8 | 0 | 3 | 0 | 3 | 0 | 1 | 1 | 28 | 8 | 0 | 0 | 27 | 0 | 5 | 1 | 26 | 9 |
| 18 | 55 | 2 | 2 | 1 | 5 | 0 | 5 | 2 | 2 | 0 | 1 | 0 | 31 | 7 | 1 | 0 | 40 | 0 | 7 | 2 | 16 | 12 |
| 25 | 74 | 0 | 1 | 0 | 2 | 0 | 5 | 0 | 5 | 2 | 1 | 0 | 28 | 9 | 0 | 0 | 16 | 0 | 10 | 1 | 20 | 4 |
| Sept. — 1 | 57 | 2 | 1 | 0 | 8 | 0 | 5 | 0 | 3 | 0 | 0 | 0 | 30 | 10 | 0 | 0 | 28 | 0 | 12 | 0 | 29 | 3 |
| Sept. 8 | 56 | 3 | 2 | 0 | 4 | 0 | 5 | 0 | 8 | 1 | 0 | 0 | 30 | 5 | 0 | 0 | 17 | 0 | 5 | 0 | 24 | 8 |
| 15 | 62 | 1 | 0 | 0 | 7 | 0 | 5 | 1 | 4 | 1 | 2 | 1 | 27 | 4 | 1 | 0 | 21 | 1 | 9 | 2 | 18 | 12 |
| 22 | 51 | 2 | 1 | 0 | 7 | 0 | 1 | 0 | 7 | 0 | 0 | 0 | 22 | 5 | 0 | 0 | 19 | 0 | 8 | 0 | 21 | 11 |
| 29 | 44 | 2 | 2 | 0 | 5 | 0 | 10 | 2 | 2 | 1 | 0 | 0 | 21 | 12 | 0 | 0 | 20 | 0 | 7 | 0 | 27 | 12 |
| Oct. — 6 | 47 | 0 | 0 | 0 | 3 | 0 | 1 | 0 | 7 | 0 | 0 | 0 | 10 | 2 | 0 | 0 | 18 | 0 | 7 | 0 | 16 | 10 |
| Oct. 13 | 37 | 0 | 1 | 0 | 4 | 0 | 16 | 3 | 11 | 4 | 0 | 0 | 31 | 10 | 0 | 0 | 16 | 0 | 8 | 0 | 29 | 9 |
| 20 | 38 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 7 | 0 | 0 | 0 | 23 | 6 | 2 | 0 | 15 | 0 | 9 | 1 | 25 | 9 |
| 27 | 32 | 1 | 0 | 0 | 10 | 0 | 6 | 2 | 11 | 2 | 0 | 0 | 17 | 4 | 0 | 0 | 28 | 1 | 10 | 2 | 13 | 12 |
| Nov. — 3 | 29 | 0 | 1 | 1 | 2 | 0 | 8 | 0 | 14 | 2 | 2 | 0 | 18 | 2 | 0 | 0 | 13 | 0 | 8 | 2 | 24 | 10 |
| Nov. 10 | 42 | 3 | 0 | 0 | 2 | 0 | 2 | 0 | 8 | 4 | 1 | 1 | 20 | 7 | 0 | 0 | 31 | 0 | 3 | 0 | 16 | 14 |
| 17 | 35 | 3 | 0 | 0 | 4 | 0 | 1 | 0 | 8 | 0 | 2 | 1 | 19 | 6 | 0 | 0 | 18 | 0 | 1 | 0 | 22 | 11 |
| 24 | 34 | 0 | 0 | 1 | 3 | 0 | 4 | 1 | 4 | 0 | 0 | 0 | 18 | 3 | 1 | 1 | 18 | 1 | 5 | 2 | 35 | 8 |
| Déc. — 1 | 44 | 0 | 0 | 0 | 5 | 0 | 8 | 0 | 9 | 0 | 0 | 0 | 26 | 1 | 3 | 0 | 14 | 1 | 5 | 0 | 19 | 9 |
| Dec. 8 | 42 | 0 | 0 | 0 | 2 | 0 | 7 | 0 | 4 | 3 | 1 | 0 | 14 | 5 | 6 | 0 | 11 | 0 | 4 | 0 | 29 | 5 |
| 15 | 22 | 2 | 2 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 2 | 1 | 15 | 3 | 18 | 4 | 18 | 1 | 1 | 0 | 19 | 14 |
| 22 | 30 | 0 | 1 | 0 | 4 | 0 | 5 | 0 | 4 | 1 | 1 | 0 | 11 | 3 | 11 | 2 | 19 | 0 | 2 | 0 | 27 | 8 |
| 29 | 19 | 0 | 0 | 0 | 8 | 0 | 5 | 1 | 2 | 0 | 1 | 1 | 3 | 1 | 12 | 3 | 10 | 1 | 5 | 1 | 28 | 5 |

Autres maladies déclarées: — Other diseases reported:

| | Anthrax / Anthrax | | Actinomycose / Actinomycosis | | Botulisme / Food-poisoning | | Eclampsie / Eclampsia | | Môle hydatiforme / Hydatids | | Ophtalmie des nouveau-nés / Ophthalmia neonatorum | Tétanos / Tetanus | | Trachome / Trachoma | Variole / Smallpox | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | C. | D. | C. | C. | D. |
| 1919 | 1 | 1 | — | — | — | — | — | — | 45 | 10 | 24 | — | 10 | 7 | — | — |
| 1920 | 1 | 1 | 1 | 0 | — | — | — | — | 45 | 6 | 48 | 15 | 15 | 10 | 95 | 0 |
| 1921 | 2 | — | 2 | 2 | 1 | 0 | — | — | 36 | 15 | 35 | 21 | 14 | 12 | 2 | 0 |
| 1922 | 2 | 1 | 1 | 0 | 4 | 2 | — | — | 36 | 8 | 26 | 22 | 9 | 7 | 0 | 0 |
| 1923 | 0 | 0 | 2 | 1 | 10 | 0 | 39 | 2 | 30 | 2 | 27 | 19 | 7 | 5 | 0 | 0 |
| 1924 | 0 | 0 | 1 | 0 | 4 | 0 | 39 | 2 | 38 | 4 | 31 | 16 | 3 | 20 | 0 | 0 |

Saturnisme, 2 cas en 1924. — Lead-poisoning, 2 cases during 1924.

Empoisonnement par le phosphore, 1 cas en 1924. — Phosphorous-poisoning, 1 case during 1924.

Pas de cas de choléra asiatique, de dengue, de fièvre jaune, de peste ou de typhus exanthématique, 1919-1924. — No case of Asiatic cholera, dengue, yellow fever, plague or typhus, 1919-1924.

*a* Déclaration obligatoire depuis le 20 mai 1919. — Declared notifiable disease on May 20th, 1919.
*b* Depuis le 1er juillet 1920, ces trois variétés de grippe seulement sont à déclaration obligatoire. — Only forms of influenza notifiable since July 1st, 1920.
*c* Pour les cas, total pour 6 mois (juillet-décembre); pour les décès, total pour l'année entière. — Cases, total for six months; deaths, total for the entire year.

# EUROPE

## ALLEMAGNE — GERMANY

(Population: 61 892 000. E. 1er janvier 1924.)

**Nombre de cas de maladies à déclaration obligatoire constatés en Allemagne en 1919-1924; par semaines en 1924.**
**Number of Cases of Notifiable Diseases reported in Germany in 1919-1924; by weeks in 1924.**

*Source:* Veröffentlichungen des Reichsgesundheitsamts, Berlin.

| Semaine finissant le: Week ended: | Anthrax | Diphtérie Diphtheria | Dysenterie Dysentery | Fièvre puerpérale Puerperal fever | Fièvre typhoïde Enteric fever | Méningite cérébro-spinale Cerebro-spinal meningit. | Poliomyélite Poliomyelit. | Rage humaine Rabies | Scarlatine Scarlet fever | Trachome Trachoma | Typhus ex. Typhus | Variole Smallpox |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total 1919 | 18 | — | — | — | — | — | — | — | — | — | 3549 | 5012 |
| Total 1920 | 35 | — | — | — | — | — | — | — | — | — | 483 | 2042 |
| Total 1921 | 80 | 63018 | 31624 | 8006 | 18808 | 696 | — | 43 | 48281 | 1887 | 533 | 688 |
| Total 1922 | 129 | 37949 | 5036 | 6422 | 10993 | 1622 | — | 52 | 32448 | 1522 | 386 | 215 |
| Total 1923 | 106 | 31942 | 8449 | 5592 | 13162 | 1149 | *204 | 64 | 27234 | 1192 | 27 | 17 |
| Total 1924 | 118 | 37248 | 5789 | 6776 | 14221 | 742 | 498 | 45 | 32798 | 1784 | 8 | 16 |
| Janvier-January 5 | 1 | 604 | 41 | 110 | 205 | 10 | 3 | 0 | 438 | 4 | 0 | 0 |
| 12 | 0 | 687 | 64 | 121 | 201 | 11 | 3 | 3 | 525 | 10 | 0 | 0 |
| 19 | 2 | 732 | 53 | 152 | 213 | 16 | 5 | 4 | 572 | 18 | 0 | 0 |
| 26 | 4 | 771 | 80 | 138 | 166 | 23 | 2 | 3 | 574 | 21 | 0 | 0 |
| Février-February 2 | 1 | 714 | 57 | 137 | 186 | 12 | 4 | 1 | 471 | 18 | 0 | 0 |
| 9 | 4 | 793 | 58 | 163 | 203 | 19 | 5 | 2 | 544 | 12 | 0 | 0 |
| 16 | 3 | 781 | 56 | 154 | 148 | 15 | 6 | 0 | 547 | 31 | 0 | 0 |
| 23 | 1 | 843 | 76 | 165 | 199 | 19 | 5 | 0 | 557 | 13 | 0 | 1 |
| Mars-March 1 | 5 | 775 | 90 | 169 | 162 | 22 | 2 | 1 | 571 | 21 | 0 | 0 |
| 8 | 1 | 893 | 85 | 161 | 170 | 23 | 9 | 0 | 615 | 19 | 0 | 0 |
| 15 | 1 | 821 | 60 | 161 | 112 | 13 | 5 | 2 | 573 | 55 | 1 | 0 |
| 22 | 0 | 832 | 56 | 142 | 165 | 17 | 3 | 0 | 535 | 30 | 0 | 1 |
| 29 | 2 | 824 | 111 | 151 | 197 | 24 | 1 | 3 | 623 | 36 | 0 | 0 |
| Avril-April 5 | 0 | 800 | 75 | 140 | 206 | 18 | 4 | 0 | 546 | 34 | 0 | 0 |
| 12 | 1 | 735 | 77 | 130 | 132 | 14 | 2 | 2 | 535 | 19 | 0 | 2 |
| 19 | 3 | 633 | 53 | 135 | 120 | 18 | 2 | 0 | 467 | 28 | 1 | 0 |
| 26 | 0 | 665 | 51 | 165 | 119 | 15 | 3 | 1 | 450 | 33 | 1 | 0 |
| Mai-May 3 | 5 | 667 | 61 | 146 | 175 | 23 | 0 | 0 | 510 | 21 | 0 | 0 |
| 10 | 3 | 664 | 58 | 115 | 136 | 16 | 3 | 0 | 509 | 44 | 0 | 0 |
| 17 | 5 | 724 | 75 | 133 | 156 | 26 | 3 | 1 | 488 | 43 | 0 | 0 |
| 24 | 5 | 698 | 82 | 112 | 175 | 23 | 6 | 0 | 516 | 35 | 0 | 1 |
| 31 | 2 | 602 | 87 | 117 | 166 | 9 | 2 | 0 | 450 | 37 | 0 | 2 |
| Juin-June 7 | 1 | 644 | 103 | 86 | 194 | 13 | 2 | 0 | 481 | 35 | 0 | 1 |
| 14 | 2 | 527 | 97 | 96 | 187 | 15 | 2 | 0 | 419 | 21 | 0 | 0 |
| 21 | 0 | 536 | 109 | 93 | 225 | 13 | 0 | 0 | 493 | 26 | 2 | 1 |
| 28 | 3 | 569 | 120 | 94 | 281 | 15 | 9 | 2 | 481 | 78 | 0 | 1 |
| Juillet-July 5 | 0 | 577 | 147 | 105 | 272 | 21 | 8 | 1 | 527 | 29 | 0 | 1 |
| 12 | 4 | 587 | 152 | 96 | 347 | 17 | 9 | 2 | 547 | 49 | 0 | 1 |
| 19 | 4 | 553 | 167 | 109 | 352 | 13 | 11 | 1 | 485 | 52 | 0 | 1 |
| 26 | 2 | 484 | 232 | 135 | 426 | 15 | 10 | 0 | 446 | 35 | 0 | 0 |
| Août-August 2 | 4 | 536 | 304 | 116 | 394 | 6 | 24 | 1 | 460 | 34 | 0 | 1 |
| 9 | 3 | 508 | 264 | 106 | 508 | 11 | 18 | 1 | 498 | 32 | 0 | 0 |
| 16 | 3 | 545 | 265 | 99 | 498 | 16 | 19 | 1 | 507 | 58 | 1 | 0 |
| 23 | 3 | 595 | 349 | 106 | 476 | 7 | 20 | 1 | 589 | 36 | 1 | 0 |
| 30 | 1 | 539 | 247 | 95 | 463 | 8 | 12 | 0 | 621 | 23 | 0 | 0 |
| Sept.-Sept. 6 | 7 | 627 | 249 | 100 | 530 | 11 | 23 | 2 | 716 | 58 | 0 | 0 |
| 13 | 2 | 751 | 198 | 132 | 574 | 14 | 12 | 0 | 754 | 17 | 0 | 0 |
| 20 | 2 | 689 | 181 | 109 | 457 | 12 | 20 | 0 | 833 | 48 | 0 | 0 |
| 27 | 3 | 728 | 120 | 126 | 455 | 14 | 19 | 0 | 875 | 57 | 0 | 0 |
| Oct.-Oct. 4 | 2 | 666 | 134 | 117 | 405 | 13 | 34 | 0 | 887 | 46 | 0 | 0 |
| 11 | 0 | 742 | 104 | 157 | 414 | 9 | 15 | 3 | 877 | 19 | 0 | 0 |
| 18 | 3 | 795 | 85 | 131 | 388 | 6 | 25 | 0 | 840 | 29 | 0 | 0 |
| 25 | 2 | 773 | 88 | 126 | 399 | 16 | 23 | 1 | 880 | 45 | 0 | 0 |
| Nov.-Nov. 1 | 2 | 832 | 59 | 132 | 344 | 12 | 19 | 1 | 917 | 60 | 0 | 0 |
| 8 | 2 | 939 | 88 | 164 | 313 | 6 | 23 | 0 | 935 | 76 | 0 | 1 |
| 15 | 1 | 865 | 59 | 130 | 319 | 9 | 13 | 0 | 933 | 21 | 1 | 0 |
| 22 | 2 | 826 | 56 | 128 | 222 | 10 | 16 | 1 | 825 | 41 | 0 | 0 |
| 29 | 1 | 959 | 62 | 165 | 250 | 11 | 7 | 1 | 928 | 34 | 0 | 0 |
| Déc.-Dec. 6 | 3 | 961 | 135 | 151 | 254 | 15 | 5 | 0 | 989 | 43 | 0 | 0 |
| 13 | 4 | 1008 | 34 | 188 | 238 | 8 | 11 | 2 | 956 | 52 | 0 | 0 |
| 20 | 3 | 943 | 44 | 162 | 198 | 10 | 6 | 0 | 855 | 29 | 0 | 0 |
| 27 | 0 | 686 | 31 | 105 | 126 | 10 | 5 | 1 | 628 | 19 | 0 | 1 |

Autres maladies déclarées: — Other diseases reported:

| | *Fièvre récurrente Relapsing fever* | *Morve Glanders* | *Trichinose Trichinosis* |
|---|---|---|---|
| 1921 | 53 | 1 | 16 |
| 1922 | 31 | 2 | 110 |
| 1923 | 4 | 1 | 25 |
| 1924 | 3 | 2 | 13 |

* Données pour huit Etats seulement. — Data for eight States only.
Pas de cas de choléra asiatique ou de peste, 1919-1924. — No case of Asiatic cholera or plague, 1919-1924.

## NATALITÉ ET MORTALITÉ DANS LES VILLES D'ALLEMAGNE DE PLUS DE 100.000 HABITANTS 1920-1924

## BIRTHS AND DEATHS IN GERMAN CITIES WITH MORE THAN 100,000 POPULATION: 1920-1924.

*Source:* Veröffentlichungen des Reichsgesundheitsamts, Berlin.

| Classement des naissances et des décès<br>Classification of Births and Deaths | | 1920 [1]<br>Pop. 14 855 000<br>49 villes – 49 cities | | 1921 [1]<br>Pop. 16 347 000<br>47 villes – 47 cities | | 1922 [1]<br>Pop. 16 564 000<br>46 villes – 46 cities | | 1923 [1]<br>Pop. 16 673 000<br>46 villes – 46 cities | | 1924 [2]<br>Pop. 16 668 000<br>46 villes – 46 cities | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nombre<br>Number | Taux par<br>Rate per<br>1000 | Nombre<br>Number | Taux par<br>Rate per<br>1000 | Nombre<br>Number | Taux par<br>Rate per<br>1000 | Nombre<br>Number | Taux par<br>Rate per<br>1000 | Nombre<br>Number | Taux par<br>Rate per<br>1000 |
| Naissances | Births | 326461 | 22.0 | 324273 | 19.8 | 287537 | 17.4 | 253247 | 15.2 | 254441 | 15.3 |
| Mort-nés | Still-births | 11775 | 0.8 | 12083 | 0.8 | 11039 | 0.7 | 9515 | 0.6 | 10027 | 0.6 |
| Décès, total | Deaths, total | 217580 | 14.6 | 207131 | 12.7 | 221581 | 13.4 | 211626 | 12.7 | 194340 | 11.7 |
| Décès, non résidents exclus | Deaths, excluding non-residents | 199311 | 13.4 | 191401 | 11.7 | 207344 | 12.6 | 199135 | 12.0 | 181172 | 10.9 |
| Décès, au-dessous d'un an | Deaths under 1 year | 42923 | 2.9 | 40087 | 2.5 | 37241 | 2.2 | 32426 | 1.9 | 25724 | 1.5 |
| *Décès dus aux causes mentionnées:* | *Deaths by specified cause:* | | | | | | | | | | |
| Coqueluche | Whooping cough | 1654 | 0.11 | 971 | 0.06 | 1611 | 0.10 | 1189 | 0.07 | 1029 | 0.06 |
| Diphtérie | Diphtheria | 1749 | 0.12 | 1390 | 0.09 | 1048 | 0.06 | 1022 | 0.06 | 779 | 0.05 |
| Dysenterie | Dysentery | — | — | 1039 | 0.06 | 443 | 0.03 | 620 | 0.04 | 295 | 0.02 |
| Fièvre typhoïde | Enteric fever | 540 | 0.04 | 468 | 0.03 | 374 | 0.02 | 352 | 0.02 | 362 | 0.02 |
| Fièvre puerpérale | Puerperal fever | 1663 | 4.92 | 1702 | *a* 5.06 | 1603 | *a* 5.37 | 1654 | *a* 6.29 | 1278 | *a* 4.83 |
| Méningite cérébro-spin. | Cerebro-spin. mening. | — | — | 136 | 0.01 | 324 | 0.02 | 297 | 0.02 | 176 | 0.01 |
| Rougeole et rubéole | Measles and German measles | 1169 | 0.08 | 993 | 0.06 | 1074 | 0.06 | 2302 | 0.14 | 286 | 0.02 |
| Scarlatine | Scarlet fever | 400 | 0.03 | 357 | 0.02 | 280 | 0.02 | 217 | 0.01 | 203 | 0.01 |
| Tuberculose, total | Tuberculosis, total | 25309 | 1.70 | 24964 | 1.53 | 27232 | 1.64 | 29432 | 1.77 | 22583 | 1.35 |
| Tuberculose, au-dessous de 15 ans | Tuberculosis, under 15 years | | | | | | | | | 2278 | 0.14 |
| Pneumonie | Pneumonia | | | 17830 | 1.09 | 21573 | 1.30 | 17136 | 1.03 | 15138 | 0.91 |
| Grippe | Influenza | 39589 | 2.67 | 3572 | 0.22 | 6895 | 0.42 | 3532 | 0.21 | *b* 1221 | 0.07 |
| Autres affections des organes respiratoires | Other respiratory diseases | | | 7483 | 0.46 | 8385 | 0.51 | 7379 | 0.44 | *c* 1831<br>6586 | 0.11<br>0.40 |
| Maladies organiques du cœur | Organic diseases of the heart | — | — | — | — | — | — | — | — | 18235 | 1.09 |
| Apoplexie | Apoplexy | — | — | — | — | | | | | 12408 | 0.74 |
| Convulsions, au-dessous de 2 ans | Convulsions, under 2 years | — | — | — | — | — | — | — | — | 2210 | 0.13 |
| Diarrhée, total | Diarrhœa, total | 10947 | 0.74 | 10010 | 0.61 | 6107 | 0.37 | 6976 | 0.42 | 4153 | 0.25 |
| Diarrhée, au-dessous d'un an | Diarrhœa, under 1 year | 8868 | 0.59 | 7035 | 0.44 | 4723 | 0.29 | 5109 | 0.31 | 2982 | 0.18 |
| Cancer | Cancer | — | — | — | — | — | — | — | — | 21208 | 1.27 |
| Alcoolisme | Alcoholism | — | — | — | — | — | — | — | — | 131 | 0.01 |
| Suicide | Suicide | 4359 | 0.29 | 4393 | 0.27 | 4635 | 0.28 | 4415 | 0.26 | 4883 | 0.29 |
| Meurtre et homicide | Murder | 469 | 0.03 | 403 | 0.02 | 430 | 0.03 | 474 | 0.03 | 315 | 0.02 |
| Exécution | Execution | | | | | | | | | 12 | 0.00 |
| Accident | Accident | 8337 | 0.56 | 7121 | 0.44 | 7380 | 0.45 | 6832 | 0.41 | 5927 | 0.36 |
| Autres morts violentes | Other extern. violences | | | | | | | | | 659 | 0.04 |
| Autres causes | Other causes | 121395 | 8.17 | 124299 | 7.60 | 132097 | 7.97 | 127797 | 7.67 | 72432 | 4.35 |

1 Renseignements définitifs. — Final figures.
2 Renseignements hebdomadaires. — Weekly returns.
*a* Taux par 1000 naissances, mort-nés inclus. — Rates per 1000 births, including still-births.
*b* Avec complications. — With complications.
*c* Sans complications. — Without complications.

## ALLEMAGNE (villes). — GERMANY (cities).

(Population: 16 668 000. E. 1er juil. 1924.)

**Naissances, décès par toutes les causes et décès causés par certaines maladies infectieuses déclarés dans 46 villes principales en 1919-1924; par semaines en 1924.**

**Births, Deaths from all Causes and Deaths from Certain Infectious Diseases notified in 46 Principal Cities in 1919-1924; by weeks in 1924.**

*Source:* Veröffentlichungen des Reichsgesundheitsamts.

| Semaine finissant le : Week ending : | Naissances Births | Décès Total Deaths | Décès de 0 à 1 an Deaths up to 1 year | Coqueluche Whooping-cough | Diphtérie Diphtheria | Dysenterie Dysentery | Fièvre puerpér. Puerperal fever | Fièvre typhoïde Enteric fever | Grippe Influenza | Rougeole, rubéole Measles and German measles | Scarlatine Scarlet fever | Pneumonie Pneumonia | Autres maladies des voies respir. Other diseases of respir. organs | Tuberculose Total Tuberculosis | Tuberculose jusqu'à 15 ans Tuberculosis up to 15 years | Maladies organ. du cœur Organic heart diseases | Diarrhée Total Diarrhœa Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total 1919 | 257725 | 221760 | 30702 | 1599 | 2412 | — | 1395 | 678 | — | 635 | 536 | — | — | 37429 | — | — | 7739 |
| Total 1920 | 326461 | 217580 | 42923 | 1654 | 1749 | — | 1663 | 540 | — | 1169 | 400 | — | — | 25309 | — | — | 10947 |
| Total 1921 | 324273 | 207131 | 40087 | 971 | 1390 | — | 1702 | 468 | 3572 | 993 | 357 | 17830 | 7483 | 24964 | — | — | 10010 |
| Total 1922 | 287537 | 221581 | 37241 | 1611 | 1048 | 443 | 1603 | 374 | 6985 | 1074 | 280 | 21573 | 8385 | 27232 | — | — | 6107 |
| Total 1923 | 253247 | 211626 | 32426 | 1189 | 1022 | 620 | 1654 | 352 | 3532 | 2302 | 217 | 17136 | 7379 | 29432 | — | — | 6976 |
| *Total 1924 | 254441 | 194340 | 25724 | 1029 | 779 | 295 | 1278 | 362 | 3052 | 286 | 203 | 15138 | 6586 | 22583 | 2278 | 18235 | 4153 |
| Janvier-January 5 | 4827 | 3942 | 491 | 14 | 23 | 7 | 11 | 6 | 46 | 9 | 9 | 287 | 167 | 465 | 44 | 408 | 68 |
| 12 | 4974 | 4533 | 561 | 18 | 20 | 6 | 26 | 5 | 64 | 5 | 2 | 353 | 207 | 557 | 43 | 455 | 72 |
| 19 | 4941 | 4062 | 508 | 19 | 15 | 2 | 19 | 6 | 64 | 8 | 2 | 329 | 178 | 484 | 48 | 406 | 64 |
| 26 | 4804 | 4153 | 547 | 22 | 29 | 3 | 22 | 4 | 68 | 5 | 2 | 336 | 162 | 504 | 47 | 410 | 61 |
| Février-February 2 | 4786 | 4142 | 544 | 37 | 26 | 4 | 31 | 6 | 61 | 6 | 3 | 337 | 170 | 542 | 56 | 426 | 65 |
| 9 | 4890 | 4168 | 580 | 22 | 24 | 8 | 40 | 6 | 71 | 6 | 7 | 349 | 176 | 541 | 48 | 378 | 55 |
| 16 | 4905 | 4073 | 523 | 31 | 16 | 7 | 31 | 6 | 93 | 1 | 0 | 337 | 156 | 505 | 61 | 382 | 57 |
| 23 | 4966 | 4307 | 595 | 21 | 16 | 2 | 23 | 8 | 95 | 5 | 5 | 388 | 196 | 518 | 45 | 396 | 87 |
| Mars-March 1 | 4932 | 4396 | 588 | 25 | 27 | 3 | 29 | 4 | 138 | 6 | 5 | 403 | 196 | 533 | 73 | 381 | 76 |
| 8 | 5026 | 4650 | 621 | 29 | 18 | 12 | 23 | 2 | 186 | 8 | 4 | 446 | 185 | 523 | 50 | 433 | 79 |
| 15 | 4905 | 4514 | 586 | 33 | 19 | 6 | 26 | 9 | 183 | 2 | 5 | 454 | 197 | 518 | 55 | 419 | 51 |
| 22 | 4951 | 4711 | 618 | 22 | 29 | 3 | 27 | 2 | 198 | 6 | 5 | 517 | 193 | 493 | 54 | 431 | 85 |
| 29 | 5024 | 4747 | 659 | 33 | 17 | 4 | 28 | 0 | 216 | 2 | 2 | 567 | 213 | 540 | 75 | 417 | 67 |
| Avril-April 5 | 4848 | 4172 | 568 | 24 | 19 | 8 | 26 | 3 | 158 | 2 | 3 | 447 | 182 | 480 | 47 | 367 | 67 |
| 12 | 4958 | 4209 | 609 | 25 | 25 | 2 | 32 | 5 | 150 | 0 | 6 | 465 | 154 | 498 | 61 | 372 | 66 |
| 19 | 4998 | 4062 | 548 | 37 | 15 | 2 | 24 | 3 | 131 | 4 | 1 | 440 | 153 | 490 | 50 | 343 | 70 |
| 26 | 4800 | 3896 | 537 | 21 | 17 | 0 | 24 | 3 | 99 | 5 | 3 | 412 | 163 | 502 | 69 | 346 | 52 |
| Mai-May 3 | 4995 | 3807 | 541 | 24 | 18 | 5 | 17 | 6 | 70 | 4 | 8 | 344 | 121 | 497 | 66 | 354 | 71 |
| 10 | 4741 | 3659 | 492 | 14 | 10 | 3 | 24 | 1 | 62 | 5 | 3 | 302 | 130 | 457 | 50 | 365 | 63 |
| 17 | 5058 | 3767 | 535 | 20 | 8 | 3 | 31 | 4 | 46 | 6 | 4 | 339 | 93 | 465 | 53 | 347 | 67 |
| 24 | 4980 | 3634 | 465 | 23 | 11 | 4 | 18 | 3 | 36 | 4 | 3 | 320 | 95 | 497 | 40 | 336 | 87 |
| 31 | 4901 | 3411 | 462 | 12 | 9 | 1 | 10 | 6 | 37 | 5 | 2 | 272 | 95 | 506 | 50 | 287 | 64 |
| Juin-June 7 | 4808 | 3200 | 421 | 13 | 10 | 4 | 23 | 5 | 19 | 5 | 2 | 226 | 71 | 426 | 46 | 294 | 71 |
| 14 | 5148 | 3526 | 461 | 9 | 8 | 4 | 21 | 3 | 17 | 3 | 3 | 256 | 97 | 522 | 64 | 314 | 95 |
| 21 | 4865 | 3318 | 389 | 20 | 5 | 7 | 19 | 7 | 17 | 3 | 1 | 242 | 74 | 411 | 48 | 286 | 76 |
| 28 | 4867 | 3285 | 391 | 15 | 12 | 6 | 22 | 5 | 12 | 1 | 3 | 226 | 94 | 450 | 47 | 264 | 63 |
| Juillet-July 5 | 4736 | 3184 | 408 | 18 | 11 | 4 | 27 | 8 | 18 | 2 | 3 | 192 | 76 | 399 | 54 | 315 | 79 |
| 12 | 4790 | 3157 | 385 | 6 | 6 | 6 | 19 | 9 | 16 | 0 | 2 | 199 | 79 | 398 | 35 | 307 | 83 |
| 19 | 4670 | 3253 | 391 | 8 | 14 | 6 | 25 | 13 | 18 | 0 | 4 | 200 | 89 | 410 | 49 | 284 | 97 |
| 26 | 4716 | 2997 | 423 | 19 | 0 | 10 | 27 | 12 | 11 | 4 | 2 | 171 | 79 | 343 | 28 | 301 | 124 |
| Août-August 2 | 4535 | 3151 | 453 | 16 | 3 | 12 | 23 | 12 | 14 | 0 | 2 | 175 | 64 | 381 | 38 | 277 | 147 |
| 9 | 4362 | 3112 | 450 | 19 | 4 | 14 | 23 | 15 | 15 | 5 | 2 | 188 | 78 | 310 | 32 | 289 | 127 |
| 16 | 4385 | 3221 | 491 | 25 | 8 | 16 | 23 | 10 | 16 | 1 | 5 | 176 | 69 | 356 | 26 | 287 | 158 |
| 23 | 4426 | 3024 | 434 | 15 | 7 | 16 | 20 | 10 | 10 | 1 | 2 | 165 | 76 | 336 | 34 | 260 | 145 |
| 30 | 4302 | 3135 | 432 | 19 | 7 | 16 | 19 | 8 | 17 | 2 | 2 | 170 | 68 | 352 | 31 | 297 | 122 |
| Septemb.-Septemb. 6 | 4509 | 3097 | 423 | 12 | 10 | 7 | 19 | 10 | 20 | 2 | 2 | 158 | 74 | 354 | 39 | 268 | 100 |
| 13 | 4609 | 3079 | 437 | 16 | 12 | 13 | 27 | 10 | 19 | 1 | 4 | 173 | 73 | 324 | 25 | 270 | 94 |
| 20 | 4656 | 3023 | 400 | 14 | 6 | 8 | 22 | 17 | 11 | 0 | 3 | 173 | 70 | 322 | 40 | 299 | 102 |
| 27 | 4821 | 3030 | 367 | 14 | 8 | 9 | 26 | 11 | 10 | 3 | 9 | 177 | 74 | 348 | 34 | 269 | 66 |
| Octobre-October 4 | 4781 | 3126 | 402 | 18 | 11 | 3 | 28 | 9 | 12 | 2 | 5 | 184 | 76 | 342 | 25 | 296 | 72 |
| 11 | 4826 | 3256 | 421 | 15 | 12 | 7 | 29 | 15 | 15 | 2 | 1 | 197 | 74 | 339 | 30 | 309 | 88 |
| 18 | 4662 | 3221 | 397 | 9 | 10 | 8 | 31 | 7 | 16 | 2 | 5 | 228 | 89 | 330 | 26 | 303 | 70 |
| 25 | 4507 | 3262 | 396 | 13 | 12 | 4 | 12 | 6 | 16 | 7 | 9 | 201 | 70 | 359 | 34 | 336 | 82 |
| Novemb.-Novemb. 1 | 4796 | 3589 | 478 | 15 | 15 | 3 | 20 | 9 | 24 | 4 | 6 | 216 | 101 | 364 | 32 | 379 | 80 |
| 8 | 4701 | 3302 | 430 | 9 | 21 | 2 | 24 | 2 | 29 | 6 | 8 | 193 | 135 | 363 | 29 | 295 | 64 |
| 15 | 4682 | 3584 | 478 | 25 | 9 | 1 | 25 | 5 | 27 | 8 | 4 | 222 | 141 | 344 | 33 | 382 | 62 |
| 22 | 4691 | 3657 | 457 | 16 | 21 | 1 | 23 | 7 | 31 | 21 | 4 | 251 | 142 | 337 | 25 | 384 | 49 |
| 29 | 5092 | 3751 | 433 | 24 | 21 | 3 | 28 | 7 | 51 | 11 | 3 | 287 | 144 | 370 | 29 | 392 | 47 |
| Décemb.-Decemb. 6 | 4766 | 3735 | 463 | 18 | 21 | 3 | 29 | 7 | 61 | 16 | 4 | 284 | 154 | 393 | 30 | 369 | 56 |
| 13 | 4911 | 3684 | 454 | 24 | 20 | 2 | 18 | 7 | 57 | 11 | 3 | 254 | 146 | 365 | 28 | 354 | 60 |
| 20 | 4758 | 3698 | 523 | 27 | 17 | 1 | 33 | 7 | 52 | 21 | 3 | 277 | 130 | 391 | 36 | 329 | 63 |
| 27 | 4707 | 3666 | 518 | 13 | 20 | 1 | 19 | 7 | 61 | 15 | 10 | 285 | 138 | 345 | 32 | 366 | 51 |
| Janv.-Jan. 1925 3 | 5146 | 4002 | 540 | 19 | 27 | 3 | 32 | 4 | 68 | 23 | 3 | 348 | 159 | 384 | 34 | 401 | 66 |

Les totaux pour les années 1919–1923 sont corrigés; ceux pour 1924 sont provisoires. — Totals for the years 1919-1923 are revised; those for 1924 are provisional.

* 53 semaines — 53 weeks.

## ANGLETERRE ET PAYS DE GALLES. — ENGLAND AND WALES.

(Population: 38 747 000. E. 30 juin 1924.)

**Nombre de cas et de décès dus aux maladies à déclaration obligatoire déclarés en 1920-1924.**
**Number of Cases and Deaths from Notifiable Diseases reported in 1920-1924.**

*Source:* The Registrar-General's Statistical Review of England and Wales.

| Maladie — Disease | | 1920 | | 1921 | | 1922 | | 1923 | | 1924 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | C. [1] | D. [2] | C. [1] | D. [2] | C. [1] | D. [2] | C. [1] | D. [2] | *f* C. [1] |
| Choléra asiatique | Asiatic cholera | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Peste | Plague | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Coqueluche | Whooping-cough | *a* | 4401 | *a* | 4576 | *a* | 6370 | *a* | 4162 | *a* |
| Diphtérie | Diphtheria | 69481 | 5648 | 66506 | 4772 | 52153 | 4075 | 40009 | 2722 | 41982 |
| Encéphalite létharg. | Encephalitis letharg. | 890 | 480 | 1470 | 729 | 454 | 339 | 1025 | 531 | 5040 |
| Erysipèle | Erysipelas | 16051 | 838 | 13231 | 729 | 13171 | 703 | 12335 | 622 | 12878 |
| Fièvre des tranchées | Trench fever | 39 | 12 | 15 | 7 | 6 | 0 | 3 | 0 | 3 |
| Fièvre méditerran. | Mediterranean fever | *a* | 1 | *a* | 2 | *a* | 1 | *a* | 1 | *a* |
| Fièvres récurrente et continue | Relapsing and continued fevers | 42 | 13 | 46 | 12 | 18 | 8 | 28 | 5 | 37 |
| Fièvres typhoïde et paratyphoïde | Enteric fever | 3109 | 537 | 3835 | 613 | 2414 | 465 | 3211 | 450 | 4123 |
| Grippe | Influenza | *a* | 10665 | *a* | 8995 | *a* | 21498 | *a* | 8461 | *a* |
| Méningite cérébro-spinale épidémique | Cerebro-spinal fever | 583 | — | 411 | — | 344 | — | 301 | — | 396 |
| | Meningococcal meningitis | — | 533 | — | 416 | — | 360 | — | 284 | — |
| Ophtalmie des nouveau-nés | Ophthalmia neonatorum | 10304 | 46 | 8313 | 40 | 7107 | 25 | 6592 | 16 | 6267 |
| Paludisme | Malaria | 32*d* | 250 | 10*d* | 143 | 6*d* | 123 | 3*d* | 81 | 4*d* |
| Pneumonie | Pneumonia | *b*38859 | 37149 | *b*33830 | 38561 *c* | *b*52513 | 51235 *c* | *b*44624 | 36995 *c* | *b*60793 |
| Polioencéphalite | Polioencephalitis | 36 | 134 | 51 | 40 | 31 | 27 | 57 | 40 | 83 |
| Poliomyélite | Poliomyelitis | 293 | | 488 | 129 | 355 | 109 | 587 | 79 | 777 |
| Rougeole | Measles | *a* | 7190 | *a* | 2241 | *a* | 5694 | *a* | 5316 | *a* |
| Scarlatine | Scarlet fever | 119490 | 1430 | 137073 | 1305 | 108242 | 1382 | 85603 | 993 | 84652 |
| Septicémie puerpérale | Puerperal sepsis | 2898 | 1730 | 2211 | 1171 | 2134 | 1079 | 2191 | 985 | 2185 |
| Tuberculose | Tuberculosis | | | | | | | | | |
| Pulmonaire | Pulmonary | 57844 *e* | 32791 | 56334 *e* | 33505 | 53422 *e* | 33919 | 53387 *e* | 32097 | |
| Non-pulmonaire | Non-pulmonary | 15488 | 9754 | 15368 | 9173 | 15837 | 8858 | 17617 | 8691 | |
| Typhus exanthém. | Typhus | 2 | 0 | 3 | 0 | 13 | 4 | 1 | 1 | 8 |
| Variole | Smallpox | 263 | 30 | 315 | 5 | 973 | 27 | 2485 | 7 | 3765 |

*a* La déclaration des cas n'est pas obligatoire. — Notification of cases is not obligatory.
*b* Pneumonie primaire aiguë et pneumonie grippale. — Acute primary and acute influenzal pneumonia.
*c* Sont inclus les décès de grippe avec complications pulmonaires. — Including deaths from influenza with pneumonic complications.
*d* Cas contractés en Angleterre et dans le Pays de Galles. — Cases contracted in England and Wales.
*e* Ne comprend que les nouveaux cas; ces données sont prises du rapport annuel du chef médical du Ministère d'Hygiène. — New cases only; these data are derived from the Annual Report of the Chief Medical Officer of the Ministry of Health.
*f* Données provisoires. — Provisional figures.
[1] Militaires exclus. — Excluding non-civilians.
[2] Militaires inclus. — Including non-civilians.

## ANGLETERRE ET PAYS DE GALLES — ENGLAND AND WALES

(Population: 38 747 000. E. 30 juin 1924.)

**Nombre de cas de maladies à déclaration obligatoire déclarés en 1924; par semaines.**
**Number of Cases of Notifiable Diseases reported in 1924; by weeks.**

*Source:* Registrar-General's Weekly Returns of Births, Deaths and Cases of Infectious Diseases.

| Semaine finissant le: Week ended: | Diphtérie Diphtheria | Dysenterie * Dysentery | Encéphalite léthar. Encephalitis leth. | Fièvre puerpérale Puerperal fever | Fièv. typhoïde et paratyph. Enteric fever | Méningite cérébro-spinale Cerebro-spinal men. | Ophtalmie des nouv.-nés Ophthalmia neon. | *Pneumonie Pneumonia | Polio-encéphalite Polio-encephalitis | Poliomyélite Poliomyelitis | Scarlatine Scarlet fever | Variole Smallpox |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total 1919*a* . . . | 53918 | 1657 | 541 | 2016 | 3447 | 848 | 8648 | 45260 | 62 | 553 | 82398 | 294 |
| Total 1920. . . . | 69481 | 1253 | 890 | 2898 | 3109 | 583 | 10304 | 38859 | 36 | 293 | 119490 | 263 |
| Total 1921. . . . | 66506 | 1223 | 1470 | 2211 | 3835 | 411 | 8313 | 33830 | 51 | 488 | 137073 | 315 |
| Total 1922. . . . | 52153 | 789 | 454 | 2134 | 2414 | 344 | 7107 | 52513 | 31 | 355 | 108242 | 973 |
| Total 1923. . . . | 40009 | 484 | 1025 | 2191 | 3211 | 301 | 6592 | 44624 | 57 | 587 | 85603 | 2485 |
| Total 1924*a* . . . | 41982 | 388 | 5040 | 2185 | 4123 | 396 | 6267 | 60793 | 83 | 777 | 84652 | 3765 |
| Janvier — January 5 | 726 | 6 | 12 | 56 | 40 | 5 | 118 | 1183 | 1 | 7 | 1690 | 115 |
| 12 | 761 | 5 | 10 | 40 | 60 | 11 | 109 | 1268 | 2 | 10 | 1504 | 80 |
| 19 | 787 | 8 | 20 | 45 | 46 | 9 | 130 | 1234 | 1 | 8 | 1511 | 80 |
| 26 | 774 | 9 | 18 | 45 | 53 | 2 | 123 | 1471 | 1 | 6 | 1609 | 93 |
| Février — February 2 | 828 | 10 | 17 | 31 | 61 | 6 | 116 | 1858 | 1 | 3 | 1527 | 54 |
| 9 | 734 | 10 | 36 | 45 | 52 | 8 | 103 | 2236 | 2 | 4 | 1477 | 64 |
| 16 | 731 | 9 | 34 | 31 | 52 | 11 | 113 | 2181 | 2 | 5 | 1383 | 44 |
| 23 | 717 | 7 | 61 | 47 | 42 | 5 | 121 | 2106 | 0 | 6 | 1455 | 41 |
| Mars — March 1 | 733 | 8 | 84 | 47 | 41 | 6 | 102 | 2445 | 2 | 4 | 1291 | 62 |
| 8 | 671 | 14 | 93 | 40 | 30 | 12 | 129 | 2517 | 0 | 1 | 1414 | 66 |
| 15 | 659 | 5 | 85 | 32 | 44 | 14 | 135 | 2668 | 1 | 3 | 1322 | 104 |
| 22 | 648 | 10 | 124 | 60 | 31 | 5 | 110 | 2689 | 1 | 4 | 1406 | 109 |
| 29 | 716 | 9 | 156 | 52 | 36 | 15 | 119 | 2531 | 0 | 4 | 1366 | 87 |
| Avril — April 5 | 640 | 14 | 194 | 35 | 39 | 12 | 134 | 2041 | 1 | 3 | 1343 | 99 |
| 12 | 640 | 6 | 205 | 45 | 42 | 7 | 120 | 1863 | 1 | 2 | 1517 | 122 |
| 19 | 535 | 3 | 251 | 40 | 49 | 11 | 119 | 1617 | 0 | 1 | 1319 | 92 |
| 26 | 612 | 4 | 214 | 51 | 53 | 11 | 116 | 1676 | 1 | 5 | 1329 | 124 |
| Mai — May 3 | 638 | 6 | 276 | 44 | 68 | 10 | 118 | 1361 | 4 | 4 | 1256 | 131 |
| 10 | 620 | 2 | 293 | 29 | 65 | 9 | 119 | 1014 | 2 | 6 | 1425 | 80 |
| 17 | 716 | 4 | 288 | 24 | 95 | 14 | 149 | 927 | 2 | 7 | 1500 | 113 |
| 24 | 756 | 8 | 256 | 43 | 118 | 7 | 166 | 877 | 0 | 8 | 1499 | 95 |
| 31 | 779 | 10 | 248 | 45 | 90 | 14 | 149 | 902 | 0 | 6 | 1461 | 72 |
| Juin — June 7 | 649 | 10 | 179 | 41 | 79 | 3 | 140 | 740 | 1 | 3 | 1347 | 76 |
| 14 | 615 | 10 | 175 | 44 | 83 | 7 | 123 | 597 | 2 | 5 | 1310 | 55 |
| 21 | 646 | 7 | 158 | 35 | 133 | 8 | 144 | 711 | 1 | 5 | 1350 | 58 |
| 28 | 701 | 1 | 134 | 46 | 184 | 11 | 119 | 682 | 3 | 9 | 1366 | 64 |
| Juillet — July 5 | 625 | 6 | 99 | 37 | 131 | 10 | 131 | 656 | 0 | 12 | 1270 | 63 |
| 12 | 643 | 5 | 77 | 33 | 127 | 6 | 123 | 500 | 3 | 23 | 1412 | 56 |
| 19 | 692 | 2 | 80 | 27 | 92 | 7 | 110 | 569 | 1 | 27 | 1337 | 42 |
| 26 | 668 | 4 | 67 | 37 | 102 | 8 | 110 | 465 | 3 | 19 | 1465 | 49 |
| Août — August 2 | 659 | 6 | 67 | 36 | 94 | 2 | 107 | 460 | 4 | 27 | 1336 | 35 |
| 9 | 575 | 4 | 46 | 40 | 100 | 3 | 118 | 379 | 2 | 30 | 1266 | 35 |
| 16 | 622 | 2 | 67 | 41 | 93 | 7 | 124 | 397 | 0 | 29 | 1433 | 41 |
| 23 | 622 | 3 | 62 | 46 | 84 | 7 | 112 | 392 | 1 | 35 | 1282 | 43 |
| 30 | 592 | 9 | 53 | 37 | 91 | 9 | 106 | 386 | 3 | 38 | 1396 | 52 |
| Sept. — September 6 | 661 | 4 | 46 | 39 | 106 | 3 | 122 | 419 | 3 | 36 | 1417 | 66 |
| 13 | 733 | 2 | 43 | 42 | 117 | 7 | 121 | 444 | 3 | 24 | 1594 | 58 |
| 20 | 882 | 5 | 38 | 38 | 101 | 7 | 136 | 451 | 3 | 27 | 1695 | 54 |
| 27 | 869 | 2 | 55 | 30 | 91 | 7 | 123 | 497 | 3 | 32 | 1813 | 44 |
| Octobre — October 4 | 1010 | 3 | 55 | 36 | 139 | 8 | 109 | 533 | 3 | 34 | 2045 | 55 |
| 11 | 1111 | 8 | 43 | 52 | 151 | 2 | 128 | 676 | 3 | 35 | 2279 | 52 |
| 18 | 1086 | 2 | 51 | 50 | 105 | 6 | 114 | 704 | 3 | 28 | 2159 | 80 |
| 25 | 1142 | 9 | 43 | 41 | 74 | 10 | 110 | 749 | 1 | 27 | 2149 | 37 |
| Nov. — November 1 | 1161 | 4 | 40 | 39 | 93 | 2 | 103 | 870 | 1 | 28 | 2250 | 48 |
| 8 | 1062 | 3 | 43 | 38 | 61 | 5 | 107 | 970 | 2 | 30 | 2120 | 71 |
| 15 | 1166 | 10 | 31 | 55 | 68 | 6 | 101 | 1017 | 1 | 21 | 2193 | 51 |
| 22 | 1129 | 16 | 43 | 40 | 50 | 7 | 127 | 1045 | 1 | 19 | 2102 | 77 |
| 29 | 1082 | 21 | 55 | 46 | 59 | 7 | 113 | 1198 | 2 | 22 | 2296 | 122 |
| Déc. — December 6 | 1134 | 21 | 44 | 49 | 64 | 6 | 103 | 1162 | 1 | 7 | 2084 | 67 |
| 13 | 1097 | 14 | 43 | 39 | 67 | 9 | 104 | 1140 | 1 | 15 | 2032 | 82 |
| 20 | 994 | 13 | 42 | 49 | 70 | 5 | 97 | 1108 | 2 | 10 | 1953 | 77 |
| 27 | 850 | 8 | 44 | 31 | 51 | 2 | 65 | 949 | 1 | 6 | 1450 | 64 |
| 1925 Janv. — Januar. 3 | 1083 | 7 | 42 | 44 | 56 | 5 | 99 | 1262 | 0 | 7 | 1847 | 64 |

Autres maladies déclarées: — Other diseases notified:

| | *Fièvre continue* *Continued fever* | *Fièvre des tranchées* *Trench fever* | *Fièvre récurrente* *Relapsing fever* | *Typhus exanthémat.* *Typhus* |
|---|---|---|---|---|
| 1919. . . . . | 39 | 99 | 4 | 3 |
| 1920. . . . . | 35 | 39 | 7 | 2 |
| 1921. . . . . | 45 | 15 | 1 | 3 |
| 1922. . . . . | 18 | 6 | 0 | 13 |
| 1923. . . . . | 25 | 3 | 3 | 1 |
| 1924. . . . . | 37 | 3 | 0 | 8 |

* A déclaration obligatoire depuis le 1er mars 1919; comprend la pneumonie primaire aiguë et la pneumonie grippale. — Compulsorily notifiable from March 1st, 1919; including acute primary and acute influenzal pneumonia.
*a* 53 semaines. — 53 weeks.

## ANGLETERRE ET PAYS DE GALLES (Villes) — ENGLAND AND WALES (Cities)

(Population: 19 414 820. E. 30 juin 1924.)

**Naissances, décès par toutes les causes et décès causés par certaines maladies, dans 105 grandes villes en 1919-1924; par semaines en 1924 (données provisoires).**

**Births, Deaths from all Causes and Deaths from Certain Diseases in 105 Great Towns in 1919-1924; by weeks in 1924 (provisional figures).**

*Source:* Weekly Return of Births and Deaths, issued by the Registrar-General.

| Semaine finissant le: / Week ending: | | | Naissances / Births *b* | Décès Total / Deaths *b* | Décès jusqu'à 1 an / Deaths up to 1 year | Coqueluche / Whooping-cough | Diphtérie / Diphtheria | Fièvre typhoïde / Enteric fever | Grippe / Influenza | Rougeole / Measles | Scarlatine / Scarlet fever | Diarrhée et entérite jusqu'à 2 ans / Diarrhœa and Enteritis under 2 years |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Total | 1919 *a* | | 357637 | 249382 | 33133 | 1257 | 2522 | 249 | 21714 | 2305 | 744 | 4378 |
| *Total | 1920 | | 485975 | 230976 | 41381 | 2601 | 3030 | 213 | 5665 | 4049 | 816 | 5056 |
| *Total | 1921 | | 428933 | 225283 | 37370 | 2420 | 2770 | 244 | 4170 | 1475 | 779 | 8274 |
| Total | 1922 | | 406819 | 246883 | 33201 | 3660 | 2557 | 185 | 10614 | 4268 | 888 | 3090 |
| Total | 1923 | | 391608 | 221161 | 28384 | 2249 | 1676 | 159 | 4147 | 2892 | 579 | 3885 |
| Total | 1924 *a* | | 379048 | 241034 | 30459 | 2393 | 1539 | 212 | 8790 | 3558 | 525 | 3491 |
| Janvier | January | 5 | 8192 | 5226 | 581 | 38 | 42 | 6 | 98 | 78 | 12 | 48 |
| | | 12 | 7351 | 5620 | 665 | 53 | 40 | 3 | 93 | 75 | 12 | 66 |
| | | 19 | 7432 | 5423 | 646 | 47 | 31 | 6 | 153 | 68 | 17 | 52 |
| | | 26 | 7115 | 5274 | 707 | 67 | 31 | 4 | 236 | 78 | 15 | 48 |
| Février | February | 2 | 7761 | 5793 | 751 | 58 | 53 | 1 | 367 | 65 | 9 | 47 |
| | | 9 | 7419 | 6233 | 814 | 91 | 36 | 4 | 501 | 68 | 10 | 56 |
| | | 16 | 6608 | 6435 | 870 | 94 | 28 | 2 | 615 | 89 | 12 | 49 |
| | | 23 | 7463 | 6876 | 922 | 86 | 32 | 4 | 627 | 108 | 11 | 50 |
| Mars | March | 1 | 6867 | 6932 | 846 | 82 | 42 | 1 | 636 | 130 | 9 | 55 |
| | | 8 | 7785 | 7311 | 944 | 105 | 28 | 0 | 730 | 131 | 9 | 52 |
| | | 15 | 7613 | 7252 | 856 | 94 | 41 | 3 | 681 | 157 | 12 | 45 |
| | | 22 | 7343 | 6966 | 841 | 73 | 35 | 3 | 627 | 186 | 9 | 33 |
| | | 29 | 7181 | 6419 | 812 | 87 | 36 | 6 | 557 | 153 | 7 | 40 |
| Avril | April | 5 | 7357 | 5689 | 717 | 70 | 24 | 2 | 403 | 131 | 6 | 44 |
| | | 12 | 7205 | 5591 | 728 | 82 | 23 | 1 | 316 | 139 | 9 | 48 |
| | | 19 | 6883 | 5270 | 697 | 78 | 30 | 1 | 282 | 136 | 6 | 39 |
| | | 26 | 7005 | 5162 | 625 | 44 | 34 | 5 | 218 | 165 | 17 | 43 |
| Mai | May | 3 | 8092 | 4573 | 535 | 40 | 28 | 3 | 167 | 116 | 11 | 43 |
| | | 10 | 7912 | 4121 | 507 | 57 | 18 | 2 | 95 | 106 | 11 | 39 |
| | | 17 | 7665 | 4153 | 456 | 49 | 17 | 3 | 73 | 111 | 14 | 32 |
| | | 24 | 7212 | 3935 | 494 | 34 | 27 | 6 | 67 | 92 | 4 | 48 |
| | | 31 | 7552 | 3769 | 468 | 33 | 21 | 5 | 53 | 85 | 9 | 49 |
| Juin | June | 7 | 7340 | 3649 | 435 | 22 | 17 | 3 | 46 | 70 | 12 | 48 |
| | | 14 | 6404 | 3482 | 401 | 27 | 27 | 4 | 25 | 69 | 11 | 47 |
| | | 21 | 8263 | 3699 | 444 | 33 | 29 | 3 | 25 | 63 | 5 | 40 |
| | | 28 | 7682 | 3621 | 419 | 31 | 20 | 3 | 30 | 57 | 8 | 61 |
| Juillet | July | 5 | 7600 | 3531 | 405 | 23 | 17 | 8 | 21 | 36 | 7 | 38 |
| | | 12 | 7679 | 3466 | 399 | 27 | 24 | 6 | 17 | 37 | 7 | 38 |
| | | 19 | 7375 | 3292 | 362 | 21 | 17 | 5 | 16 | 32 | 5 | 56 |
| | | 26 | 7394 | 3304 | 390 | 28 | 24 | 2 | 20 | 33 | 4 | 58 |
| Août | August | 2 | 7726 | 3270 | 367 | 20 | 21 | 6 | 15 | 22 | 10 | 55 |
| | | 9 | 6745 | 3204 | 377 | 17 | 24 | 2 | 18 | 18 | 7 | 71 |
| | | 16 | 7965 | 3344 | 410 | 21 | 18 | 4 | 15 | 22 | 12 | 91 |
| | | 23 | 7532 | 3374 | 420 | 27 | 29 | 2 | 17 | 11 | 7 | 100 |
| | | 30 | 7352 | 3276 | 430 | 39 | 22 | 6 | 20 | 12 | 9 | 108 |
| Septembre | September | 6 | 7349 | 3344 | 454 | 29 | 20 | 5 | 17 | 13 | 5 | 116 |
| | | 13 | 6951 | 3517 | 480 | 29 | 22 | 3 | 18 | 9 | 16 | 121 |
| | | 20 | 7217 | 3370 | 457 | 22 | 21 | 6 | 21 | 7 | 8 | 128 |
| | | 27 | 6688 | 3452 | 459 | 24 | 28 | 3 | 21 | 6 | 8 | 135 |
| Octobre | October | 4 | 7380 | 3558 | 476 | 23 | 30 | 5 | 25 | 12 | 8 | 134 |
| | | 11 | 6935 | 3640 | 541 | 22 | 17 | 9 | 21 | 11 | 10 | 127 |
| | | 18 | 7343 | 3596 | 441 | 21 | 29 | 9 | 34 | 13 | 9 | 114 |
| | | 25 | 6763 | 3578 | 446 | 22 | 30 | 7 | 37 | 14 | 12 | 100 |
| Novembre | November | 1 | 6793 | 4152 | 560 | 26 | 33 | 4 | 46 | 29 | 7 | 102 |
| | | 8 | 7297 | 4068 | 516 | 22 | 43 | 4 | 53 | 26 | 14 | 74 |
| | | 15 | 6782 | 4213 | 554 | 23 | 45 | 4 | 60 | 35 | 10 | 68 |
| | | 22 | 6739 | 4466 | 582 | 35 | 31 | 5 | 53 | 50 | 13 | 82 |
| | | 29 | 6480 | 4368 | 598 | 35 | 20 | 2 | 67 | 57 | 8 | 73 |
| Décembre | December | 6 | 6736 | 4433 | 582 | 42 | 37 | 4 | 85 | 50 | 13 | 62 |
| | | 13 | 6360 | 4480 | 596 | 41 | 38 | 4 | 86 | 59 | 11 | 52 |
| | | 20 | 6481 | 4639 | 627 | 45 | 33 | 2 | 82 | 84 | 13 | 50 |
| 1925 | | 27 | 4240 | 4361 | 633 | 70 | 35 | 5 | 83 | 71 | 12 | 49 |
| Janvier | January | 3 | 7645 | 5212 | 716 | 64 | 41 | 6 | 100 | 63 | 13 | 67 |

| | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|---|---|
| Typhus exanthém. | Typhus | 0 | 0 | 0 | 0 | 0 | 4 |
| Variole | Smallpox | 12 | 20 | 1 | 21 | 7 | 6 |

* Les totaux pour les années 1919–1921 sont pour 96 villes. — Totals for the years 1919–1921 are for 96 cities.

*a* 53 semaines. — 53 weeks.

*b* Les données hebdomadaires, pour les naissances et les décès, sont provisoires; les totaux annuels sont corrigés. — Weekly figures for births and deaths are provisional; annual figures are corrected.

## AUTRICHE — AUSTRIA

(Population: 6 526 661. R. 7 mars 1923.)

**Nombre de cas de maladies à déclaration obligatoire et de décès dus à ces maladies déclarés en 1919-1924; par semaines en 1924.**
**Number of Cases of and Deaths from Notifiable Diseases reported in 1919-1924; by weeks in 1924.**

*Source:* Mitteilungen des Volksgesundheitsamts Wien.

| Semaine finissant le: Week ended: | | Diphtérie Diphtheria | | Dysenterie Dysentery | | Fièvre puerpérale Puerperal fever | | Fièvre typh. et paratyphoïde Enteric fever | | Méningite cérébro-spinale épidémique Epidemic Cerebro-spinal meningitis | | Scarlatine Scarlet fever | | Trachome Trachoma |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. |
| Total 1919 . . | | 5578 | 521 | 6903 | 1719 | 430 | 261 | 3944 | 536 | 46 | 37 | 2932 | 132 | 111 |
| Total 1920 . . | | 5288 | 508 | 4212 | 837 | 538 | 345 | 2761 | 315 | 34 | 20 | 4635 | 240 | 167 |
| Total 1921 . . | | 3921 | 313 | 4733 | 778 | 557 | 329 | 4288 | 404 | 21 | 17 | 4210 | 126 | 219 |
| Total 1922 . . | | 2807 | 216 | 1196 | 220 | 412 | 226 | 2303 | 240 | 38 | 33 | 2658 | 63 | 320 |
| Total 1923 . . | | 2806 | 261 | 791 | 120 | 400 | 220 | 2043 | 154 | 38 | 22 | 3154 | 76 | 379 |
| Total 1924 * . | | 3291 | 115 | 535 | 43 | 283 | 77 | 2093 | 127 | 39 | 14 | 3826 | 28 | 341 |
| Janv.—Jan. | 5 | 39 | 1 | 3 | 0 | 2 | 0 | 29 | 4 | 0 | 0 | 49 | 0 | 1 |
| | 12 | 62 | 5 | 4 | 1 | 4 | 0 | 15 | 5 | 1 | 0 | 83 | 1 | 1 |
| | 19 | 56 | 4 | 6 | 1 | 9 | 1 | 25 | 3 | 1 | 0 | 56 | 0 | 4 |
| | 26 | 75 | 4 | 7 | 0 | 4 | 1 | 16 | 1 | 0 | 0 | 76 | 0 | 1 |
| Févr.—Feb. | 2 | 58 | 2 | 4 | 0 | 8 | 4 | 22 | 2 | 1 | 0 | 77 | 2 | 8 |
| | 9 | 63 | 6 | 9 | 0 | 7 | 4 | 27 | 0 | 4 | 1 | 85 | 1 | 3 |
| | 16 | 56 | 1 | 4 | 1 | 8 | 0 | 22 | 3 | 1 | 2 | 71 | 2 | 30 |
| | 23 | 63 | 1 | 5 | 0 | 11 | 2 | 20 | 2 | 0 | 1 | 66 | 0 | 9 |
| Mars—March | 1 | 69 | 4 | 15 | 1 | 9 | 3 | 20 | 3 | 2 | 1 | 86 | 0 | 7 |
| | 8 | 54 | 1 | 4 | 2 | 7 | 4 | 13 | 2 | 0 | 0 | 65 | 1 | 5 |
| | 15 | 61 | 5 | 7 | 0 | 3 | 0 | 39 | 0 | 0 | 2 | 87 | 4 | 8 |
| | 22 | 60 | 2 | 7 | 1 | 8 | 1 | 20 | 0 | 1 | 1 | 69 | 0 | 8 |
| | 29 | 51 | 1 | 4 | 1 | 7 | 1 | 20 | 4 | 3 | 1 | 74 | 2 | 5 |
| Avril—April | 5 | 45 | 1 | 11 | 1 | 4 | 2 | 33 | 1 | 0 | 1 | 55 | 0 | 3 |
| | 12 | 61 | 2 | 8 | 0 | 3 | 0 | 13 | 0 | 0 | 1 | 71 | 0 | 3 |
| | 19 | 67 | 6 | 13 | 1 | 4 | 2 | 16 | 2 | 2 | 1 | 46 | 0 | 1 |
| | 26 | 69 | 2 | 8 | 0 | 4 | 2 | 36 | 5 | 0 | 0 | 65 | 0 | 6 |
| Mai—May | 3 | 68 | 5 | 8 | 1 | 6 | 2 | 28 | 2 | 0 | 0 | 53 | 0 | 2 |
| | 10 | 60 | 5 | 10 | 0 | 7 | 2 | 32 | 1 | 0 | 0 | 58 | 1 | 0 |
| | 17 | 66 | 0 | 13 | 1 | 4 | 2 | 26 | 0 | 2 | 1 | 55 | 0 | 3 |
| | 24 | 51 | 3 | 15 | 1 | 2 | 2 | 31 | 2 | 2 | 0 | 64 | 0 | 4 |
| | 31 | 47 | 0 | 8 | 1 | 3 | 0 | 40 | 5 | 1 | 0 | 46 | 0 | 1 |
| Juin—June | 7 | 53 | 0 | 11 | 1 | 2 | 0 | 37 | 4 | 1 | 1 | 51 | 0 | 5 |
| | 14 | 54 | 1 | 5 | 0 | 6 | 1 | 58 | 2 | 2 | 0 | 55 | 1 | 3 |
| | 21 | 55 | 1 | 15 | 2 | 1 | 2 | 56 | 3 | 1 | 0 | 68 | 0 | 14 |
| | 28 | 53 | 1 | 4 | 1 | 3 | 0 | 48 | 1 | 0 | 0 | 59 | 0 | 6 |
| Juillet—July | 5 | 51 | 0 | 9 | 0 | 5 | 0 | 60 | 3 | 0 | 0 | 64 | 2 | 4 |
| | 12 | 36 | 0 | 16 | 0 | 4 | 0 | 40 | 1 | 0 | 0 | 85 | 1 | 3 |
| | 19 | 46 | 2 | 36 | 2 | 4 | 0 | 67 | 5 | 0 | 0 | 58 | 0 | 0 |
| | 26 | 40 | 1 | 18 | 1 | 8 | 0 | 88 | 2 | 1 | 0 | 61 | 0 | 4 |
| Août—August | 2 | 54 | 3 | 41 | 4 | 8 | 3 | 79 | 1 | 1 | 0 | 43 | 0 | 1 |
| | 9 | 45 | 2 | 37 | 3 | 3 | 2 | 62 | 4 | 2 | 0 | 41 | 1 | 0 |
| | 16 | 46 | 0 | 17 | 2 | 6 | 0 | 50 | 2 | 0 | 0 | 44 | 1 | 1 |
| | 23 | 34 | 1 | 22 | 3 | 3 | 0 | 81 | 3 | 1 | 0 | 51 | 0 | 10 |
| | 30 | 45 | 0 | 14 | 1 | 6 | 1 | 55 | 2 | 0 | 0 | 49 | 0 | 2 |
| Sept.—Sept. | 6 | 48 | 3 | 7 | 1 | 10 | 3 | 63 | 3 | 2 | 0 | 40 | 0 | 25 |
| | 13 | 51 | 2 | 10 | 2 | 9 | 5 | 66 | 3 | 2 | 0 | 55 | 0 | 3 |
| | 20 | 49 | 2 | 14 | 2 | 1 | 1 | 83 | 3 | 0 | 0 | 71 | 0 | 3 |
| | 27 | 65 | 0 | 7 | 0 | 9 | 1 | 60 | 3 | 0 | 0 | 78 | 0 | 1 |
| Oct.—Oct. | 4 | 84 | 1 | 12 | 0 | 1 | 0 | 59 | 6 | 0 | 0 | 71 | 0 | 12 |
| | 11 | 77 | 2 | 12 | 1 | 8 | 1 | 52 | 4 | 0 | 0 | 80 | 0 | 4 |
| | 18 | 77 | 2 | 7 | 1 | 5 | 2 | 54 | 2 | 0 | 0 | 103 | 0 | 19 |
| | 25 | 85 | 1 | 11 | 1 | 3 | 2 | 45 | 4 | 1 | 0 | 67 | 0 | 1 |
| Nov.—Nov. | 1 | 69 | 3 | 3 | 0 | 6 | 2 | 33 | 1 | 0 | 0 | 106 | 0 | 5 |
| | 8 | 97 | 2 | 4 | 0 | 6 | 1 | 50 | 0 | 1 | 0 | 137 | 0 | 9 |
| | 15 | 98 | 1 | 2 | 0 | 6 | 2 | 31 | 2 | 0 | 0 | 86 | 0 | 18 |
| | 22 | 81 | 4 | 2 | 0 | 5 | 2 | 30 | 2 | 1 | 0 | 96 | 1 | 7 |
| | 29 | 83 | 4 | 1 | 0 | 5 | 3 | 37 | 4 | 1 | 0 | 122 | 1 | 13 |
| Déc.—Dec. | 6 | 92 | 4 | 7 | 1 | 5 | 1 | 17 | 1 | 0 | 0 | 100 | 0 | 22 |
| | 13 | 97 | 2 | 4 | 0 | 6 | 0 | 36 | 1 | 0 | 0 | 120 | 0 | 14 |
| | 20 | 77 | 3 | 5 | 0 | 5 | 2 | 18 | 6 | 0 | 0 | 113 | 1 | 7 |
| | 27 | 68 | 4 | 5 | 0 | 4 | 2 | 18 | 3 | 1 | 0 | 71 | 3 | 7 |
| 1925 Janv.—Jan. | 3 | 80 | 2 | 4 | 0 | 6 | 3 | 17 | 1 | 0 | 0 | 124 | 2 | 5 |

Autres maladies déclarées: — Other diseases reported:

| Année Year | Anthrax Anthrax | | Fièvre récurrente Relapsing fever | Lèpre Leprosy | | Paludisme Malaria | | Poliomyélite aiguë Acute Poliomyelitis | | Rage humaine Rabies | | Tétanos Tetanus | | Typhus exanthém. Typhus | | Variole Smallpox | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | C. | D. | C. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. |
| 1919 . . . . | 1 | 0 | 104 | 0 | 0 | 5754 | 40 | 1 | 0 | 7 | 4 | — | — | 996 | 141 | 411 | 96 |
| 1920 . . . . | 0 | 0 | 0 | 0 | 0 | — | 0 | 26 | 0 | 4 | 3 | — | — | 86 | 10 | 253 | 46 |
| 1921 . . . . | 8 | 3 | 1 | 0 | 0 | 123 | 0 | 13 | 0 | 11 | 1 | — | — | 81 | 10 | 18 | 1 |
| 1922 . . . . | 8 | 1 | 1 | 2 | 1 | — | 0 | 10 | 0 | 23 | 8 | — | — | 23 | 4 | 4 | 0 |
| 1923 . . . . | 7 | 2 | 0 | 1 | 0 | — | 0 | 14 | 0 | 5 | 2 | — | — | 3 | 0 | 17 | 0 |
| 1924 . . . . | 7 | 2 | 0 | 0 | 0 | 1 | 0 | 19 | 4 | 3 | 3 | 6 | 4 | 0 | 0 | 0 | 0 |

Pas de cas de choléra asiatique, de peste ou de fièvre jaune, 1919-1924. — No case of Asiatic cholera, plague or yellow fever, 1919-1924.

Décès constatés par le Département de statistique médicale: — Deaths reported by the Medical Statistical Bureau:

| Année Year | Diphtérie Diphtheria | Dysenterie Dysentery | Fièvre puerpérale Puerperal Fever | Fièvre typhoïde Enteric Fever | Scarlatine Scarlet Fever |
|---|---|---|---|---|---|
| 1919 . . . . . | 691 | 1819 | 299 | 617 | 220 |
| 1920 . . . . . | 720 | 1170 | 435 | 382 | 316 |
| 1921 . . . . . | 470 | 1149 | 434 | 506 | 166 |
| 1922 . . . . . | 364 | 267 | 335 | 318 | 85 |
| 1923 . . . . . | 365 | 152 | 223 | 250 | 97 |

* Les données hebdomadaires sont provisoires; les totaux annuels sont corrigés. — Weekly data are provisional; totals are corrected.

## AUTRICHE — AUSTRIA

### VILLE DE VIENNE — CITY OF VIENNA

(Population: 1 868 294. E. 31 déc. 1924.)

**Naissances, décès par toutes les causes et décès causés par certaines maladies en 1919-1924; par semaines en 1924.**
**Births, Deaths from all Causes and Deaths from Certain Diseases in 1919-1924; by weeks in 1924.**

*Source:* Statistische Wochenberichte der Stadt Wien.

| Semaine finissant le: Week ending: | Naissances Births | Décès par toutes les causes Death from all causes | Coqueluche Whooping-cough | Diphtérie et croup Diphtheria and croup | Fièvre typhoïde Enteric fever | Grippe Influenza | Rougeole Measles | Scarlatine Scarlet fever | Tuberculose pulmonaire Tuberculosis of the lungs | Tuberculose, autres formes Tuberculosis, other forms | Pneumonie et pleurésie Pneumonia and pleuresy | Autres malad. des org. resp. Other diseases of resp. org. | Diarrhée et entérite Diarrhœa and enteritis 0-2 ans-years | Maladies organiques du cœur Organic heart diseases |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total 1919 . | 24347 | 40932 | 198 | 110 | 170 | 533 | 124 | 53 | 8539 | 2067 | 2904 | 1832 | 756 | 5201 |
| Total 1920 . | 27821 | 34197 | 179 | 125 | 111 | 1119 | 315 | 90 | 5660 | 1804 | 3078 | 3522 | 895 | 3917 |
| Total 1921 . | 28924 | 28297 | 79 | 71 | 121 | 99 | 44 | 42 | 3936 | 1329 | 2274 | 965 | 889 | 3650 |
| Total 1922 . | 29982 | 30068 | 175 | 63 | 85 | 282 | 8 | 40 | 4342 | 1210 | 2909 | 1006 | 777 | 3857 |
| Total 1923 . | 27961 | 25480 | 153 | 119 | 49 | 80 | 75 | 39 | 3794 | 836 | 2019 | 611 | 444 | 3385 |
| Total 1924* . | 27912 | 25552 | 277 | 114 | 75 | 81 | 27 | 29 | 3496 | 708 | 2103 | 717 | 357 | 3248 |
| Janvier- 5 | 461 | 548 | 1 | 6 | 1 | 1 | 0 | 0 | 70 | 31 | 41 | 13 | 8 | 78 |
| January 12 | 534 | 445 | 3 | 3 | 0 | 3 | 0 | 0 | 46 | 13 | 33 | 13 | 4 | 74 |
| 19 | 496 | 436 | 5 | 2 | 0 | 0 | 0 | 0 | 47 | 10 | 33 | 20 | 4 | 69 |
| 26 | 527 | 559 | 4 | 1 | 1 | 1 | 0 | 0 | 76 | 19 | 45 | 18 | 12 | 76 |
| Février- 2 | 527 | 549 | 2 | 2 | 1 | 2 | 0 | 1 | 70 | 10 | 32 | 20 | 9 | 89 |
| February 9 | 561 | 493 | 5 | 3 | 0 | 1 | 0 | 0 | 61 | 10 | 41 | 13 | 10 | 67 |
| 16 | 515 | 464 | 1 | 4 | 1 | 0 | 1 | 1 | 67 | 13 | 35 | 15 | 8 | 66 |
| 23 | 546 | 568 | 3 | 4 | 0 | 5 | 2 | 0 | 83 | 22 | 55 | 20 | 9 | 76 |
| Mars- 1 | 557 | 536 | 4 | 3 | 0 | 0 | 0 | 0 | 76 | 9 | 38 | 21 | 9 | 70 |
| March 8 | 545 | 512 | 5 | 9 | 0 | 4 | 0 | 1 | 73 | 11 | 36 | 21 | 4 | 67 |
| 15 | 550 | 586 | 6 | 3 | 0 | 7 | 0 | 0 | 88 | 17 | 62 | 17 | 6 | 81 |
| 22 | 582 | 499 | 2 | 1 | 0 | 6 | 0 | 0 | 64 | 20 | 50 | 13 | 6 | 66 |
| 29 | 560 | 614 | 1 | 1 | 1 | 5 | 0 | 0 | 91 | 8 | 81 | 30 | 10 | 98 |
| Avril- 5 | 588 | 712 | 4 | 4 | 2 | 7 | 0 | 0 | 101 | 23 | 85 | 31 | 9 | 92 |
| April 12 | 550 | 527 | 11 | 6 | 1 | 3 | 0 | 0 | 85 | 21 | 46 | 12 | 6 | 64 |
| 19 | 523 | 551 | 18 | 6 | 4 | 3 | 0 | 2 | 78 | 22 | 43 | 19 | 4 | 68 |
| 26 | 627 | 491 | 8 | 4 | 0 | 0 | 1 | 0 | 83 | 18 | 45 | 13 | 2 | 63 |
| Mai- 3 | 585 | 484 | 11 | 4 | 1 | 2 | 1 | 0 | 68 | 16 | 48 | 10 | 2 | 63 |
| May 10 | 585 | 574 | 13 | 5 | 3 | 1 | 1 | 1 | 93 | 22 | 36 | 18 | 5 | 60 |
| 17 | 585 | 494 | 9 | 2 | 0 | 0 | 1 | 0 | 67 | 23 | 38 | 12 | 6 | 48 |
| 24 | 651 | 464 | 10 | 2 | 0 | 3 | 2 | 0 | 66 | 12 | 44 | 12 | 6 | 65 |
| 31 | 566 | 561 | 11 | 2 | 1 | 1 | 0 | 2 | 73 | 17 | 47 | 21 | 10 | 52 |
| Juin- 7 | 591 | 414 | 5 | 0 | 1 | 2 | 1 | 0 | 74 | 15 | 22 | 5 | 9 | 51 |
| June 14 | 540 | 505 | 8 | 3 | 10 | 0 | 3 | 3 | 79 | 12 | 33 | 9 | 9 | 57 |
| 21 | 587 | 429 | 4 | 1 | 3 | 1 | 0 | 0 | 62 | 17 | 21 | 9 | 3 | 72 |
| 28 | 617 | 469 | 8 | 2 | 1 | 0 | 0 | 0 | 61 | 18 | 39 | 13 | 5 | 48 |
| Juillet- 5 | 553 | 525 | 6 | 3 | 1 | 1 | 0 | 0 | 73 | 15 | 36 | 13 | 7 | 66 |
| July 12 | 534 | 410 | 1 | 2 | 2 | 1 | 0 | 0 | 67 | 10 | 29 | 7 | 7 | 53 |
| 19 | 534 | 403 | 15 | 1 | 2 | 0 | 0 | 0 | 52 | 14 | 27 | 8 | 11 | 52 |
| 26 | 605 | 492 | 5 | 1 | 1 | 0 | 2 | 0 | 74 | 14 | 34 | 16 | 6 | 50 |
| Août- 2 | 508 | 462 | 11 | 2 | 0 | 1 | 1 | 0 | 60 | 15 | 28 | 11 | 6 | 46 |
| August 9 | 569 | 406 | 10 | 0 | 0 | 0 | 0 | 1 | 72 | 9 | 25 | 10 | 5 | 29 |
| 16 | 514 | 438 | 8 | 1 | 3 | 0 | 0 | 0 | 66 | 5 | 26 | 10 | 10 | 38 |
| 23 | 445 | 364 | 4 | 0 | 0 | 0 | 0 | 0 | 47 | 9 | 21 | 12 | 6 | 58 |
| 30 | 505 | 471 | 2 | 2 | 2 | 1 | 0 | 0 | 58 | 14 | 30 | 13 | 5 | 47 |
| Sept.- 6 | 502 | 371 | 4 | 1 | 1 | 2 | 0 | 0 | 43 | 16 | 26 | 12 | 4 | 48 |
| Sept. 13 | 489 | 343 | 6 | 0 | 1 | 0 | 0 | 0 | 55 | 4 | 24 | 6 | 8 | 47 |
| 20 | 549 | 423 | 6 | 0 | 1 | 0 | 0 | 0 | 41 | 9 | 31 | 7 | 5 | 37 |
| 27 | 465 | 395 | 0 | 0 | 6 | 0 | 0 | 0 | 61 | 13 | 39 | 10 | 4 | 45 |
| Octobre- 4 | 428 | 433 | 3 | 2 | 1 | 1 | 0 | 0 | 50 | 13 | 23 | 8 | 8 | 51 |
| October 11 | 470 | 323 | 1 | 3 | 0 | 1 | 1 | 0 | 38 | 6 | 21 | 8 | 4 | 40 |
| 18 | 467 | 486 | 2 | 0 | 0 | 1 | 2 | 1 | 68 | 12 | 36 | 14 | 5 | 56 |
| 25 | 453 | 480 | 1 | 0 | 5 | 0 | 0 | 0 | 61 | 10 | 30 | 7 | 7 | 63 |
| Novembre- 1 | 453 | 451 | 2 | 0 | 0 | 2 | 0 | 2 | 51 | 10 | 37 | 14 | 7 | 44 |
| Nov. 8 | 439 | 444 | 3 | 2 | 4 | 0 | 0 | 1 | 51 | 9 | 36 | 12 | 6 | 52 |
| 15 | 484 | 486 | 2 | 1 | 1 | 2 | 0 | 0 | 75 | 13 | 38 | 9 | 8 | 61 |
| 22 | 493 | 490 | 1 | 1 | 1 | 1 | 1 | 1 | 58 | 16 | 48 | 20 | 8 | 61 |
| 29 | 487 | 650 | 5 | 0 | 1 | 1 | 1 | 1 | 78 | 9 | 65 | 17 | 9 | 88 |
| Décembre- 6 | 502 | 407 | 6 | 0 | 1 | 1 | 1 | 1 | 48 | 7 | 44 | 9 | 9 | 53 |
| Dec. 13 | 477 | 520 | 2 | 2 | 2 | 2 | 2 | 2 | 50 | 7 | 58 | 12 | 1 | 58 |
| 20 | 503 | 471 | 3 | 0 | 0 | 1 | 1 | 1 | 63 | 7 | 37 | 9 | 7 | 67 |
| 27 | 477 | 612 | 3 | 4 | 4 | 2 | 0 | 4 | 68 | 5 | 64 | 13 | 16 | 97 |
| 1925 Janv.- Jan. 3 | 451 | 312 | 3 | 3 | 3 | 2 | 2 | 3 | 66 | 8 | 61 | 12 | 3 | 61 |

* 53 semaines. — 53 weeks.

## BELGIQUE — BELGIUM

(Population: 7 606 820. E. 31 décembre 1923.)

**Nombre de cas de maladies transmissibles déclarés en 1919-1924; par décades en 1924.**
**Number of Cases of Communicable Diseases reported in 1919-1924; by ten-day periods in 1924.**

*Source:* Bulletin du Ministère de l'Intérieur et de l'Hygiène du Royaume de Belgique.

| Décade finissant le: Ten-day period ending: | Diphtérie Diphtheria | Dysenterie Dysentery | Encéphalite létharg. Encephalitis lethargica | Fièvre typhoïde Enteric fever | Méningite cérébro-spinale Cerebro-spinal meningitis | Scarlatine Scarlet fever | Septicémie puerpérale Puerperal septicæmia | Varicelle Chickenpox | Variole et varioloïde Smallpox |
|---|---|---|---|---|---|---|---|---|---|
| Total 1919 | 8080 | 132 | — | 1713 | 63 | 2259 | 37 | — | 42 |
| Total 1920 | 6409 | 146 | — | 1475 | 38 | 1985 | 65 | — | 91 |
| Total 1921 | 3914 | 493 | 243 | 1429 | 35 | 1588 | 49 | — | 21 |
| Total 1922 | 2279 | 34 | 26 | 1090 | 50 | 1496 | 47 | — | 23 |
| Total 1923 | 2353 | 93 | 27 | 1403 | 56 | 2008 | 49 | 1 | 31 |
| Total 1924 | 1645 | 21 | 22 | 907 | 34 | 1252 | 42 | 56 | 31 |
| Janvier — 10 | 55 | 3 | 1 | 13 | 0 | 30 | 0 | 0 | 0 |
| January 20 | 51 | 2 | 0 | 12 | 1 | 55 | 4 | 0 | 1 |
| 31 | 63 | 0 | 1 | 13 | 2 | 53 | 2 | 0 | 0 |
| Février — 10 | 47 | 0 | 0 | 13 | 0 | 35 | 1 | 0 | 0 |
| February 20 | 61 | 1 | 0 | 10 | 1 | 62 | 1 | 0 | 0 |
| 29 | 43 | 0 | 0 | 10 | 0 | 61 | 2 | 0 | 0 |
| Mars — 10 | 53 | 1 | 2 | 9 | 2 | 42 | 1 | 0 | 0 |
| March 20 | 56 | 0 | 0 | 12 | 0 | 43 | 6 | 0 | 0 |
| 31 | 61 | 0 | 0 | 34 | 0 | 87 | 6 | 0 | 0 |
| Avril — 10 | 45 | 1 | 0 | 17 | 4 | 47 | 0 | 0 | 0 |
| April 20 | 39 | 0 | 0 | 13 | 4 | 41 | 0 | 0 | 0 |
| 30 | 52 | 0 | 1 | 15 | 0 | 34 | 1 | 0 | 0 |
| Mai — May 10 | 32 | 0 | 1 | 28 | 1 | 43 | 0 | 0 | 3 |
| 20 | 33 | 0 | 0 | 13 | 0 | 37 | 0 | 1 | 1 |
| 31 | 45 | 0 | 0 | 38 | 2 | 40 | 2 | 0 | 2 |
| Juin — June 10 | 64 | 0 | 3 | 21 | 1 | 24 | 1 | 0 | 3 |
| 20 | 51 | 5 | 4 | 31 | 0 | 38 | 0 | 0 | 0 |
| 30 | 50 | 1 | 2 | 28 | 2 | 24 | 0 | 4 | 4 |
| Juillet — July 10 | 31 | 1 | 1 | 34 | 2 | 33 | 1 | 5 | 3 |
| 20 | 26 | 1 | 0 | 24 | 0 | 30 | 0 | 0 | 5 |
| 31 | 28 | 0 | 1 | 36 | 0 | 26 | 2 | 32 | 0 |
| Août — 10 | 43 | 1 | 0 | 40 | 0 | 14 | 0 | 0 | 1 |
| August 20 | 44 | 1 | 0 | 32 | 0 | 25 | 0 | 11 | 1 |
| 31 | 51 | 1 | 0 | 39 | 0 | 16 | 0 | 1 | 0 |
| Septembre — 10 | 24 | 0 | 1 | 35 | 3 | 16 | 2 | 1 | 0 |
| September 20 | 37 | 0 | 1 | 38 | 1 | 13 | 1 | 0 | 0 |
| 30 | 38 | 0 | 0 | 48 | 1 | 14 | 1 | 0 | 0 |
| Octobre — 10 | 44 | 0 | 0 | 47 | 0 | 12 | 0 | 0 | 0 |
| October 20 | 43 | 0 | 1 | 19 | 1 | 26 | 0 | 0 | 1 |
| 31 | 50 | 0 | 0 | 46 | 0 | 30 | 3 | 0 | 0 |
| Novembre — 10 | 36 | 0 | 0 | 25 | 1 | 25 | 0 | 0 | 1 |
| November 20 | 32 | 2 | 0 | 21 | 1 | 22 | 0 | 0 | 1 |
| 30 | 38 | 0 | 0 | 29 | 1 | 56 | 2 | 0 | 1 |
| Décembre 10 | 70 | 0 | 0 | 26 | 0 | 34 | 0 | 0 | 3 |
| December 20 | 46 | 0 | 1 | 25 | 2 | 28 | 2 | 0 | 0 |
| 31 | 63 | 0 | 1 | 13 | 1 | 36 | 1 | 1 | 0 |

Autres maladies déclarées: — Other diseases reported:

| | *Rage humaine Rabies* | *Typhus exanthém. Typhus* |
|---|---|---|
| 1919 | 4 | 23 |
| 1920 | 1 | 9 |
| 1921 | 1 | 11 |
| 1922 | 0 | 7 |
| 1923 | 1 | 0 |
| 1924 | 0 | 0 |

Pas de cas de choléra asiatique ou de peste, 1919-1924. — No case of Asiatic cholera or plague, 1919-1924.

## BULGARIE — BULGARIA

(Population: 5 115 112 *a*. E. 31 déc. 1923.)

**Nombre de cas de maladies à déclaration obligatoire et de décès dus à ces maladies déclarés en 1920-1924; par mois en 1924.**
**Number of Cases of and Deaths from Notifiable Diseases reported in 1920-1924; by months in 1924.**

*Source:* Bulletin sur l'état des maladies infectieuses dans le Royaume de Bulgarie.

| Maladie — Disease | | | Total 1920 | Total 1921 | Total 1922 | Total 1923 | Total 1924 | Janv. Jan. | Fév. Feb. | Mars Mar. | Avril April | Mai May | Juin June | Juil. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Coqueluche | Whooping-cough | C. | 4696 | 4979 | 2277 | 3636 | 7765 | 94 | 181 | 347 | 627 | 900 | 996 | 1201 | 1071 | 969 | 495 | 469 | 425 |
| | | D. | 266 | 340 | 199 | 212 | 459 | 8 | 7 | 16 | 32 | 40 | 34 | 67 | 61 | 45 | 48 | 51 | 50 |
| Diphtérie | Diphtheria | C. | 1347 | 1054 | 795 | 1094 | 1505 | 102 | 171 | 140 | 98 | 106 | 79 | 87 | 87 | 118 | 189 | 165 | 163 |
| | | D. | 194 | 151 | 108 | 157 | 228 | 15 | 28 | 24 | 20 | 15 | 9 | 8 | 8 | 16 | 27 | 27 | 31 |
| Dysenterie | Dysentery | C. | 698 | 569 | 740 | 489 | 389 | 3 | 2 | 0 | 4 | 2 | 4 | 71 | 81 | 69 | 103 | 47 | 3 |
| | | D. | 167 | 103 | 122 | 106 | 76 | 2 | 0 | 0 | 3 | 0 | 1 | 8 | 17 | 11 | 17 | 17 | 0 |
| Erysipèle | Erysipelas | C. | 280 | 967 | 239 | 301 | 278 | 26 | 28 | 30 | 24 | 16 | 11 | 11 | 18 | 24 | 31 | 24 | 35 |
| | | D. | 19 | 44 | 20 | 17 | 14 | 2 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 6 | 1 | 0 |
| Fièvre typhoïde | Enteric fever | C. | 3080 | 1915 | 2867 | 2799 | 7127 | 244 | 162 | 110 | 66 | 32 | 72 | 134 | 264 | 606 | 1883 | 2122 | 1432 |
| | | D. | 321 | 222 | 301 | 326 | 816 | 42 | 31 | 16 | 12 | 6 | 9 | 11 | 26 | 44 | 120 | 274 | 225 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | C. | 17 | 36 | 6 | 12 | 13 | 0 | 1 | 0 | 1 | 2 | 2 | 1 | 1 | 3 | 2 | 0 | 0 |
| | | D. | 4 | 22 | 3 | 6 | 9 | 0 | 1 | 0 | 1 | 1 | 2 | 1 | 0 | 2 | 1 | 0 | 0 |
| Oreillons | Mumps | C. | 2283 | 7434 | 1034 | 739 | 235 | 20 | 40 | 41 | 46 | 35 | 15 | 3 | 3 | 4 | 3 | 2 | 23 |
| | | D. | 1 | 5 | 4 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rougeole | Measles | C. | 10772 | 25710 | 8700 | 10264 | 7393 | 813 | 1220 | 1134 | 646 | 728 | 649 | 236 | 100 | 20 | 273 | 749 | 825 |
| | | D. | 402 | 1896 | 434 | 504 | 293 | 38 | 39 | 34 | 22 | 38 | 12 | 15 | 11 | 0 | 4 | 40 | 31 |
| Scarlatine | Scarlet fever | C. | 4398 | 5645 | 7196 | 15585 | 7466 | 1746 | 1176 | 786 | 520 | 465 | 350 | 298 | 302 | 446 | 563 | 425 | 389 |
| | | D. | 760 | 1453 | 1211 | 2935 | 1360 | 302 | 206 | 161 | 107 | 92 | 73 | 63 | 69 | 72 | 84 | 74 | 57 |
| Typhus exanthém. | Typhus | C. | 2885 | 874 | 488 | 413 | 197 | 17 | 25 | 36 | 43 | 54 | 16 | 3 | 1 | 0 | 1 | 0 | 1 |
| | | D. | 376 | 99 | 68 | 51 | 28 | 1 | 3 | 8 | 7 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| Varicelle | Chickenpox | C. | 364 | 802 | 412 | 353 | 485 | 72 | 56 | 72 | 102 | 22 | 23 | 2 | 4 | 5 | 15 | 52 | 60 |
| | | D. | 3 | 26 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Variole | Smallpox | C. | 527 | 22 | 24 | 20 | 5 | 0 | 0 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | D. | 70 | 5 | 3 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Autres maladies déclarées: — Other diseases notified:

| | Anthrax Anthrax | | Fièvre récurrente Relapsing fever | | Trichinose Trichinosis | |
|---|---|---|---|---|---|---|
| | C. | D. | C. | D. | C. | D. |
| 1924: | 9 | 0 | 1 | 0 | 34 | 3 |

Les données mensuelles sont provisoires; les totaux annuels sont corrigés. — The weekly figures are provisional; the totals for the year are corrected figures
*a* Le chiffre de la population est approximatif. — The figure for the population is approximative.

## DANEMARK — DENMARK

(Population: 3 371 900. E. 1er juillet 1924.)

**Nombre de cas de maladies à déclaration obligatoire déclarés en 1920-1924; par mois en 1924.**
**Number of Cases of Notifiable Diseases reported in 1920-1924; by months in 1924.**

*Sources:* Skematisk Sygeliste for Kongeriget Danmark 1924. Medicinal beretning for den danske Stat 1920-1923.

| Maladie — Disease | | Total 1920 | Total 1921 | Total 1922 | Total 1923 | Total 1924 | Jan. Jan. | Fév. Feb. | Mars Mar. | Avril April | Mai May | Juin June | Juil. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Angine | Tonsillitis | 60869 | 59702 | 46927 | 44396 | 43677 | 3820 | 3610 | 3440 | 3361 | 3446 | 2825 | 2888 | 3839 | 4163 | 4344 | 4153 | 3788 |
| Anthrax | Anthrax | 0 | 0 | 0 | 1 | 8 | 0 | 3 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 |
| Bronchite aiguë | Acute bronchitis | 66366 | 56955 | 71822 | 78288 | 70635 | 8242 | 7582 | 8743 | 9318 | 8219 | 4703 | 3311 | 2599 | 2801 | 4390 | 5196 | 5531 |
| Broncho-pneumonie | Broncho-pneumonia | 23561 | 19488 | 23559 | 23788 | 21562 | 2014 | 2074 | 2606 | 3547 | 3147 | 1675 | 1191 | 851 | 780 | 1153 | 1228 | 1296 |
| Choléra nostras et entérite | Cholera nostras and enteritis | 25287 | 25571 | 22202 | 20183 | 24365 | 2172 | 1600 | 1354 | 1471 | 1582 | 1780 | 2487 | 3289 | 3320 | 2146 | 1544 | 1620 |
| Coqueluche | Whooping cough | 19943 | 5037 | 22060 | 26446 | 8344 | 731 | 964 | 831 | 703 | 721 | 511 | 525 | 399 | 518 | 677 | 826 | 938 |
| Diphtérie | Diphtheria | 13567 | 13945 | 7929 | 5692 | 5234 | 535 | 474 | 500 | 363 | 332 | 311 | 393 | 279 | 341 | 567 | 539 | 600 |
| Delirium tremens | Delirium tremens | 56 | 51 | 43 | 63 | 60 | 5 | 3 | 4 | 5 | 9 | 4 | 4 | 6 | 4 | 4 | 5 | 7 |
| Dysenterie | Dysentery | 2 | 2 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Encéphalite léthargique | Encephalitis lethargica | 223 | 138 | 42 | 87 | 105 | 3 | 4 | 10 | 14 | 17 | 8 | 6 | 7 | 5 | 6 | 10 | 15 |
| Erysipèle | Erysipelas | 3697 | 3742 | 2994 | 2743 | 2512 | 225 | 202 | 189 | 221 | 203 | 153 | 176 | 177 | 235 | 236 | 234 | 261 |
| Fièvre aphteuse | Foot and mouth disease | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 4 | 6 |
| Septicémie puerpérale | Puerperal fever | 330 | 329 | 258 | 244 | 239 | 22 | 23 | 20 | 15 | 36 | 15 | 18 | 8 | 23 | 17 | 19 | 23 |
| Fièvre paratyph. | Paratyph. fever | 140 | 127 | 236 | 292 | 163 | 4 | 8 | 4 | 6 | 0 | 4 | 9 | 8 | 50 | 47 | 16 | 7 |
| Fièvre typhoïde | Typhoid fever | 290 | 295 | 241 | 268 | 304 | 23 | 20 | 8 | 12 | 16 | 9 | 33 | 47 | 54 | 42 | 16 | 24 |
| Gale | Scabies | 18654 | 17049 | 11926 | 9305 | 7550 | 897 | 817 | 717 | 608 | 573 | 456 | 409 | 372 | 554 | 830 | 697 | 626 |
| Grippe | Influenza | 175736 | 20153 | 237635 | 79648 | 72507 | 4220 | 9907 | 24369 | 13544 | 5626 | 1972 | 1103 | 1177 | 1693 | 2290 | 2576 | 4030 |
| Hoquet épidém. | Epid. hiccoughs | | 372 | 44 | 234 | 578 | 4 | 17 | 71 | 52 | 10 | 6 | 5 | 0 | 1 | 2 | 66 | 344 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | 144 | 92 | 84 | 96 | 122 | 10 | 11 | 14 | 17 | 12 | 8 | 8 | 9 | 5 | 4 | 7 | 17 |
| Oreillons | Mumps | 4773 | 7503 | 3293 | 3941 | 3186 | 494 | 548 | 561 | 378 | 308 | 175 | 84 | 76 | 71 | 107 | 209 | 175 |
| Paludisme | Malaria | 15 | 23 | 28 | 14 | 25 | 3 | 2 | 2 | 5 | 0 | 2 | 3 | 3 | 2 | 0 | 2 | 1 |
| Paradysenterie | Paradysentery | — | — | — | — | 11 | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 6 | 0 | 0 |
| Pemphigus des nouveau-nés | Pemphigus of new-born | 146 | 130 | 105 | 89 | 105 | 7 | 6 | 10 | 9 | 10 | 11 | 6 | 11 | 7 | 12 | 9 | 7 |
| Pneum. croupale | Croupous pneum. | 6144 | 6253 | 5736 | 5673 | 4721 | 473 | 378 | 529 | 667 | 577 | 375 | 339 | 226 | 212 | 280 | 324 | 341 |
| Poliomyélite aiguë | Acute poliomyelitis | 60 | 70 | 59 | 76 | 154 | 5 | 3 | 3 | 1 | 0 | 2 | 11 | 21 | 45 | 39 | 18 | 6 |
| Rhumatisme articulaire | Rheumatic fever | 4233 | 4336 | 3952 | 3660 | 3313 | 336 | 299 | 295 | 309 | 296 | 309 | 244 | 211 | 222 | 256 | 282 | 254 |
| Rougeole | Measles | 27758 | 5181 | 9596 | 32166 | 33794 | 5959 | 5065 | 4527 | 4608 | 5361 | 2858 | 1908 | 894 | 489 | 757 | 627 | 741 |
| Scarlatine | Scarlet fever | 12285 | 11093 | 5109 | 3851 | 3116 | 281 | 274 | 217 | 214 | 176 | 163 | 216 | 212 | 302 | 370 | 373 | 318 |
| Tétanos des nouveau-nés | Tetanus of new-born | 86 | 65 | 67 | 75 | 66 | 3 | 4 | 10 | 5 | 6 | 3 | 10 | 4 | 8 | 6 | 4 | 3 |
| Tuberculose pulmonaire | Pulmonary tuberculosis | 2962 | 3186 | 3012 | 2893 | 3260 | 251 | 296 | 280 | 345 | 334 | 306 | 239 | 237 | 226 | 239 | 273 | 234 |
| Variole | Smallpox | 0 | 7 | 0 | 0 | 25 | 0 | 0 | 0 | 0 | 4 | 17 | 4 | 0 | 0 | 0 | 0 | 0 |
| Chancre mou | Soft chancre | 997 | 771 | 502 | 404 | 304 | 37 | 26 | 25 | 11 | 24 | 24 | 22 | 42 | 24 | 24 | 28 | 17 |
| Gonorrhée | Gonorrhœa | 11733 | 11182 | 10466 | 11115 | 11142 | 875 | 828 | 797 | 785 | 831 | 818 | 1073 | 1097 | 1014 | 1119 | 1031 | 874 |
| Syphilis | Syphilis | 4329 | 3955 | 2611 | 2496 | 2239 | 196 | 185 | 187 | 173 | 186 | 187 | 177 | 181 | 164 | 245 | 166 | 192 |

Pas de cas de choléra asiatique, de peste ou de typhus exanthématique de 1920 à 1924. — No case of Asiatic cholera, plague or typhus in 1920-1924.

## DANTZIG — DANZIG

(Population: 383 995. E. 31 août 1924)

**Nombre de cas de maladies à déclaration obligatoire et de décès dus à ces maladies en 1919-1924; par semaines en 1924.**
**Number of Cases of and Deaths from Notifiable Diseases in 1919-1924; by weeks in 1924.**

*Source:* Rapports du (Reports from) Gesundheitsverwaltung der Freien Stadt Danzig.

| Semaine finissant le: Week ended: | | | Diphtérie Diphtheria | | Fièvre puerpérale Puerperal fever | | Fièvre typhoïde Enteric fever | | Scarlatine Scarlet fever | | Trachome Trachoma | Tuberculose du larynx et des poumons Tuberculosis of the larynx and of the lungs |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. |
| Total 1919 . . . . . | | | 294 | 27 | 30 | 13 | 49 | 5 | 207 | 12 | 23 | 266 |
| Total 1920 . . . . . | | | 322 | 16 | 95 | 28 | 244 | 12 | 234 | 10 | 43 | 259 |
| Total 1921 . . . . . | | | 284 | 18 | 68 | 8 | 179 | 19 | 214 | 11 | 38 | 238 |
| Total 1922 . . . . . | | | 155 | 6 | 48 | 14 | 74 | 11 | 133 | 3 | 11 | 259 |
| Total 1923 . . . . . | | | 135 | 8 | 29 | 6 | 130 | 13 | 262 | 27 | 15 | 253 |
| *Total 1924 . . . . . | | | 167 | 10 | 30 | 13 | 144 | 10 | 520 | 44 | 54 | 250 |
| Janvier | January | 5 | 4 | 0 | 0 | 0 | 4 | 0 | 14 | 1 | 0 | 0 |
| | | 12 | 5 | 0 | 0 | 0 | 2 | 0 | 18 | 4 | 0 | 2 |
| | | 19 | 2 | 0 | 2 | 1 | 10 | 0 | 18 | 1 | 2 | 7 |
| | | 26 | 5 | 0 | 3 | 0 | 1 | 0 | 4 | 0 | 0 | 6 |
| Février | February | 2 | 8 | 1 | 0 | 0 | 3 | 1 | 17 | 1 | 0 | 3 |
| | | 9 | 9 | 0 | 0 | 0 | 3 | 0 | 16 | 1 | 0 | 4 |
| | | 16 | 4 | 0 | 0 | 0 | 1 | 0 | 7 | 0 | 1 | 7 |
| | | 23 | 4 | 0 | 3 | 1 | 2 | 0 | 14 | 2 | 3 | 8 |
| Mars | March | 1 | 3 | 0 | 0 | 0 | 1 | 0 | 13 | 0 | 0 | 8 |
| | | 8 | 7 | 1 | 1 | 1 | 1 | 0 | 12 | 2 | 0 | 8 |
| | | 15 | 3 | 1 | 0 | 0 | 2 | 0 | 12 | 2 | 1 | 5 |
| | | 22 | 6 | 0 | 1 | 0 | 0 | 0 | 12 | 0 | 1 | 5 |
| | | 29 | 4 | 0 | 0 | 0 | 0 | 0 | 19 | 5 | 0 | 10 |
| Avril | April | 5 | 3 | 1 | 1 | 0 | 1 | 0 | 15 | 0 | 1 | 3 |
| | | 12 | 3 | 1 | 0 | 0 | 5 | 1 | 7 | 1 | 0 | 5 |
| | | 19 | 6 | 0 | 1 | 1 | 2 | 1 | 10 | 0 | 0 | 4 |
| | | 26 | 2 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 4 |
| Mai | May | 3 | 4 | 0 | 0 | 0 | 1 | 0 | 17 | 0 | 0 | 5 |
| | | 10 | 2 | 0 | 0 | 0 | 2 | 0 | 9 | 2 | 2 | 3 |
| | | 17 | 3 | 0 | 1 | 1 | 4 | 0 | 9 | 1 | 1 | 10 |
| | | 24 | 2 | 0 | 1 | 0 | 0 | 0 | 8 | 0 | 0 | 6 |
| | | 31 | 3 | 0 | 1 | 1 | 1 | 0 | 9 | 0 | 2 | 0 |
| Juin | June | 7 | 5 | 0 | 2 | 0 | 3 | 0 | 7 | 0 | 0 | 2 |
| | | 14 | 6 | 0 | 2 | 0 | 2 | 0 | 9 | 1 | 0 | 4 |
| | | 21 | 0 | 0 | 1 | 0 | 0 | 0 | 8 | 0 | 0 | 3 |
| | | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 1 |
| Juillet | July | 5 | 4 | 0 | 0 | 0 | 4 | 0 | 7 | 0 | 1 | 5 |
| | | 12 | 2 | 0 | 0 | 0 | 1 | 0 | 5 | 1 | 0 | 2 |
| | | 19 | 0 | 0 | 1 | 0 | 1 | 0 | 3 | 0 | 0 | 0 |
| | | 26 | 2 | 0 | 1 | 0 | 6 | 0 | 5 | 0 | 2 | 5 |
| Août | August | 2 | 1 | 0 | 1 | 0 | 1 | 0 | 12 | 3 | 2 | 5 |
| | | 9 | 9 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 4 |
| | | 16 | 1 | 0 | 0 | 0 | 3 | 2 | 5 | 0 | 1 | 2 |
| | | 23 | 5 | 1 | 0 | 0 | 0 | 0 | 11 | 2 | 2 | 5 |
| | | 30 | 1 | 0 | 1 | 0 | 9 | 0 | 7 | 0 | 0 | 3 |
| Septembre | September | 6 | 0 | 0 | 0 | 1 | 1 | 0 | 4 | 0 | 3 | 5 |
| | | 13 | 1 | 0 | 0 | 0 | 4 | 0 | 7 | 1 | 0 | 4 |
| | | 20 | 9 | 0 | 1 | 0 | 6 | 0 | 11 | 1 | 1 | 2 |
| | | 27 | 1 | 1 | 0 | 1 | 13 | 1 | 2 | 0 | 3 | 8 |
| Octobre | October | 4 | 0 | 0 | 0 | 0 | 5 | 0 | 3 | 0 | 1 | 3 |
| | | 11 | 1 | 1 | 0 | 1 | 1 | 1 | 16 | 4 | 0 | 6 |
| | | 18 | 1 | 0 | 0 | 0 | 8 | 1 | 18 | 1 | 1 | 2 |
| | | 25 | 2 | 1 | 1 | 1 | 2 | 0 | 11 | 0 | 0 | 6 |
| Novembre | November | 1 | 1 | 0 | 1 | 0 | 6 | 0 | 16 | 3 | 2 | 6 |
| | | 8 | 1 | 0 | 0 | 0 | 3 | 0 | 6 | 0 | 1 | 2 |
| | | 15 | 5 | 0 | 0 | 0 | 5 | 0 | 17 | 0 | 3 | 13 |
| | | 22 | 1 | 0 | 0 | 0 | 0 | 0 | 11 | 1 | 3 | 4 |
| | | 29 | 5 | 0 | 0 | 0 | 7 | 0 | 10 | 0 | 1 | 9 |
| Décembre | December | 6 | 0 | 0 | 3 | 3 | 5 | 1 | 15 | 3 | 0 | 7 |
| | | 13 | 1 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 1 | 2 |
| | | 20 | 2 | 0 | 0 | 0 | 1 | 1 | 6 | 0 | 12 | 2 |
| | | 27 | 7 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 11 |
| 1925 Janvier | January | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | |

Autres maladies déclarées: — Other diseases notified:

| Année Year | *Anthrax* Anthrax | | *Botulisme* Botulism | | *Dysenterie* Dysentery | | *Fièvre récurr.* Relapsing fever | | *Mén. cér.-spin.* Cer.-spin. men. | | *Rage humaine* Rabies | | *Typhus exanth.* Typhus | | *Varicelle* Chickenpox | | *Variole* Smallpox | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. |
| 1919 | 0 | 0 | 1 | 0 | 12 | 4 | 0 | 0 | 2 | 0 | 0 | 0 | 39 | 7 | 0 | 0 | 185 | 36 |
| 1920 | 0 | 0 | 0 | 0 | 43 | 6 | 2 | 0 | 4 | 1 | 2 | 1 | 7 | 2 | 0 | 0 | 22 | 3 |
| 1921 | 0 | 0 | 0 | 0 | 21 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1922 | 0 | 0 | 6 | 1 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 7 | 0 | 0 | 0 |
| 1923 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| 1924 | 0 | 0 | 2 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

* 53 semaines. — 53 weeks.

## ESPAGNE — SPAIN

(Population: 21 941 721. E. 31 déc. 1924.)

**Nombre de décès causés par certaines maladies infectieuses déclarés en 1920-1924; par mois en 1924.**
**Number of Deaths from Certain Infectious Diseases reported in 1920-1924; by months in 1924.**

*Source:* Boletín de Estadística.

| Cause de décès / Cause of Deaths | | Total 1920 | Total 1921 | Total 1922 | Total 1923 | Total 1924 | Jan. Jan. | Fév. Feb. | Mars Mar. | Avril April | Mai May | Juin June | Juil. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Coqueluche | Whooping-cough | 3502 | 1558 | 1218 | 1974 | 2178 | 209 | 243 | 262 | 246 | 215 | 210 | 180 | 178 | 120 | 104 | 99 | 112 |
| Diphtérie et croup | Diphtheria and croup | 2723 | 3037 | 2878 | 2289 | 2029 | 245 | 227 | 173 | 153 | 128 | 111 | 102 | 126 | 151 | 178 | 232 | 203 |
| Fièvre typhoïde | Typhoid fever | 6998 | 7041 | 5438 | 5131 | 4671 | 335 | 251 | 262 | 218 | 301 | 300 | 481 | 599 | 574 | 602 | 418 | 330 |
| Grippe | Influenza | 17841 | 5924 | 8068 | 8401 | 7030 | 1277 | 1635 | 1544 | 637 | 352 | 235 | 175 | 144 | 174 | 202 | 261 | 394 |
| Méningite | Meningitis | 19580 | 17803 | 17345 | 17327 | 15697 | 1310 | 1262 | 1441 | 1268 | 1402 | 1576 | 1744 | 1444 | 1161 | 1083 | 987 | 1019 |
| Paludisme | Malaria | 2044 | 1918 | 1527 | 1262 | 1195 | 47 | 52 | 55 | 59 | 74 | 114 | 183 | 159 | 149 | 131 | 96 | 76 |
| Pneumonie | Pneumonia | 11245 | 10585 | 10268 | 10152 | 9762 | 1346 | 1261 | 1173 | 829 | 713 | 626 | 598 | 484 | 499 | 640 | 714 | 879 |
| Rougeole | Measles | 5813 | 5390 | 6408 | 4048 | 4410 | 285 | 271 | 309 | 321 | 450 | 552 | 658 | 355 | 199 | 243 | 366 | 401 |
| Scarlatine | Scarlet fever | 1235 | 856 | 628 | 471 | 297 | 33 | 10 | 19 | 7 | 23 | 23 | 33 | 32 | 22 | 43 | 24 | 28 |
| Septicémie puerp. | Puerp. septicæmia | 1931 | 2073 | 2081 | 1831 | 1762 | 193 | 165 | 136 | 138 | 135 | 132 | 163 | 124 | 129 | 152 | 137 | 161 |
| Tuberculose pulmonaire | Pulmonary tuberculosis | 29991 | 26953 | 27395 | 27389 | 27610 | 2394 | 2420 | 2645 | 2556 | 2493 | 2313 | 2251 | 2098 | 2043 | 2096 | 2090 | 2211 |
| Tuberculose, autres formes | Tuberculosis, other forms | 7451 | 6624 | 6126 | 6158 | 6112 | 497 | 456 | 503 | 540 | 575 | 584 | 592 | 560 | 449 | 477 | 458 | 421 |
| Typhus exanthém. | Typhus | 155 | 73 | 80 | 68 | 32 | 2 | 1 | 0 | 3 | 2 | 2 | 3 | 4 | 1 | 0 | 1 | 13 |
| Variole | Smallpox | 3280 | 2087 | 1332 | 529 | 1214 | 64 | 34 | 34 | 14 | 22 | 38 | 75 | 127 | 158 | 187 | 209 | 252 |

3 décès causés par le choléra asiatique en 1921. — 3 deaths from Asiatic cholera in 1921.
Pas de décès dû à la peste ou à la fièvre jaune, 1920–1924. — No death from plague or yellow fever, 1920–1924.

## ÉCOSSE — SCOTLAND

(Population: 4 881 637. E. 30 juin 1924.)

**Nombre de cas de maladies à déclaration obligatoire et de décès causés par ces maladies déclarés en 1919-1924.**
**Number of Cases of and Deaths from Notifiable Diseases reported in 1919-1924.**

*Sources:* Rapport spécial de l'Administration sanitaire; Rapport annuel du Registrar-General, 1923; Quarterly Returns of Births, Deaths and Marriages; Monthly Return of Births, Deaths and Marriages (16 grandes villes seulement). — Special Report from the Scottish Board of Health; Annual Report of the Registrar-General, 1923; Quarterly Returns of Births, Deaths and Marriages; Monthly Return of Births, Deaths and Marriages (16 larger burghs only).

| Maladie — Disease | | Cas — Cases | | | | | | Décès — Deaths | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 *e* | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1924 *e* |
| Choléra asiat. | Asiatic cholera | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diarrhée infant. | Infant. Diarrhœa | | | | | | | 1015 | 1287 | 1527 | 892 | 790 | 830 | 523 |
| Diphtérie | Diphtheria | 9078 | 10766 | 10112 | 7372 | 7106 | 4262 | 727 | 724 | 625 | 550 | 500 | 451 | 300 |
| Dysenterie | Dysentery | 217*a* | 276 | 108 | 42 | 60 | 39 | 32 | 18 | 22 | 8 | 5 | 9 | — |
| *d* Encéphalite léthargique | *d* Encephalitis lethargica | 2 | 0 | 3 | 21 | 110 | 628 | — | 91 | 61 | 45 | 125 | 181 | 92 |
| Erysipèle | Erysipelas | 3007 | 3642 | 3644 | 3373 | 3354 | 1799 | 121 | 170 | 209 | 174 | 162 | 136 | — |
| Fièvre continue | Continued fever | 14 | 26 | 15 | 16 | 45 | 34 | — | — | — | — | — | — | — |
| Fièvre des tranchées | Trench fever | 31*a* | 6 | 2 | 0 | 2 | 0 | — | — | — | — | — | — | — |
| Fièvre puerp. | Puerperal fever | 342 | 587 | 624 | 586 | 580 | 394 | 150 | 242 | 250 | 228 | 218 | 184 | 99 |
| Fièvre typhoïde | Enteric fever | 634 | 743 | 595 | 439 | 794 | 205 | 84*f* | 100*f* | 89*f* | 67*f* | 76*f* | 40*f* | 13 |
| Ophtalmie des nouveau-nés | Ophthalmia neonatorum | 1431 | 1871 | 1897 | 1485 | 1390 | 964 | — | — | — | — | — | — | — |
| Paludisme | Malaria | 2856*a* | 1989 | 308 | 117 | 88 | 46 | 27 | 33 | 18 | 7 | 8 | 9 | — |
| * Pneumonie primaire aiguë | Acute primary pneumonia | 2913 | 9155 | 7854 | 13951 | 9039 | 8959 | 6742 | 5987 | 4940 | 6617 | 4674 | 6706 | 4425 |
| * Pneumonie grippale aiguë | Acute influenzal pneumonia | | | | | | 1109 | 4352 | 702 | 453 | 1648 | 166 | 985 | — |
| *d* Rougeole | *d* Measles | 1510 | 2037 | 177 | 3266 | 554 | 14526 | 899 | 816 | 269 | 2695 | 1118 | 1592 | 1093 |
| Scarlatine | Scarlet fever | 12787 | 17449 | 17025 | 14589 | 16754 | 8984 | 222 | 245 | 270 | 247 | 352 | 410 | 264 |
| Tuberculose pulmonaire | Pulmonary tuberculosis | 7572*a* | 8099 | 8030 | 7752 | 7080 | 4096 | 4294*b* | 4194*b* | 3970*b* | 4061*b* | 3996*b* | 3887*b* | 2250*b* |
| Tuberculose, autres formes | Non-pulmonary tuberculosis | 4017 | 4169 | 4442 | 4594 | 5203 | 2476 | 2032 | 1848 | 1767 | 1757 | 1794 | 1766 | 921 |
| Typhus exanth. | Typhus | 38 | 79 | 9 | 42 | 2 | 2 | 8 | 16 | 4 | 7 | 1 | 0 | 0 |
| Varicelle | Chickenpox | — | 5737*c* | 10427*c* | — | 6071 | 6860 | 10 | 11 | 10 | 12 | 18 | — | — |
| Variole | Smallpox | 9 | 725 | 106 | 7 | 3 | 3 | 0 | 152 | 24 | 0 | 0 | 0 | 0 |

* La déclaration n'est pas obligatoire dans toutes les villes. — Notification not compulsory in every city.
*a* A déclaration obligatoire depuis le 1er août 1919. — Compulsorily notifiable from August 1st, 1919.
*b* Tuberculose du système respiratoire. — Tuberculosis of the respiratory system.
*c* La déclaration de la varicelle était obligatoire dans toute l'Ecosse, du 1er octobre 1920 au 30 septembre 1921 et du 23 juillet 1923 au 31 décembre 1923. — Chickenpox was compulsorily notifiable throughout Scotland from October 1st, 1920, to September 30th, 1921, and from July 23rd, 1923, to December 31st, 1923.
*d* La déclaration des cas n'est pas obligatoire dans toutes les villes. — Notification of cases not compulsory in every city.
*e* Renseignements pour 16 villes principales. — Data for 16 principal cities.
*f* Y compris les décès de la fièvre paratyphoïde. — Deaths from paratyphoid fever included.

## ÉCOSSE (16 villes) — SCOTLAND (16 cities)

(Population 4 881 637. E. 30 juin 1924.)

**Cas de certaines maladies infectieuses déclarés dans 16 villes principales en 1924; par semaines.**
**Cases of Certain Infectious Diseases notified in 16 Principal Cities in 1924; by weeks.**

*Source:* WEEKLY ABSTRACT FROM THE SCOTTISH BOARD OF HEALTH.

| Semaine finissant le: Week ending: | * Coqueluche *Whooping-cough | Diphtérie Diphtheria | Dysenterie Dysentery | Encéphalite léthargique Encephalitis lethargica | Erysipèle Erysipelas | Fièvre puerpérale Puerperal fever | Fièvre typhoïde Enteric fever | Méningite cér.-spin. Cer.-spin. meningitis | Ophtalmie des nouveau-nés Ophthalmia neonatorum | Paludisme Malaria | Pneumonie grippale aiguë Acute influenzal pneumonia | Pneumonie primaire aiguë Acute primary pneumonia | *Poliomyélite aiguë *Acute poliomyelitis | *Rougeole *Measles | Scarlatine Scarlet fever | Tuberculose, toutes formes Tuberculosis, all forms | *Varicelle *Chickenpox |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ** Total 1924 | 13952 | 4327 | 41 | 636 | 1791 | 409 | 212 | 172 | 970 | 47 | 1125 | 9101 | 18 | 14676 | 9155 | 6652 | 6968 |
| Janvier-January 5 | 20 | 68 | 1 | 0 | 38 | 12 | 2 | 2 | 21 | 1 | 6 | 178 | 0 | 259 | 142 | 79 | 90 |
| 12 | 289 | 91 | 1 | 0 | 39 | 10 | 2 | 1 | 25 | 1 | 4 | 217 | 0 | 1062 | 147 | 127 | 235 |
| 19 | 264 | 108 | 0 | 2 | 42 | 11 | 3 | 2 | 26 | 1 | 9 | 268 | 0 | 859 | 154 | 130 | 151 |
| 26 | 255 | 114 | 2 | 1 | 40 | 15 | 4 | 4 | 17 | 0 | 20 | 338 | 0 | 759 | 198 | 140 | 183 |
| Février-February 2 | 157 | 117 | 0 | 1 | 40 | 11 | 4 | 5 | 14 | 1 | 23 | 322 | 0 | 595 | 172 | 144 | 127 |
| 9 | 257 | 88 | 0 | 0 | 44 | 4 | 4 | 4 | 27 | 1 | 15 | 362 | 0 | 532 | 148 | 138 | 116 |
| 16 | 262 | 92 | 2 | 1 | 29 | 7 | 3 | 2 | 20 | 1 | 27 | 297 | 0 | 525 | 129 | 156 | 128 |
| 23 | 255 | 91 | 0 | 0 | 35 | 9 | 2 | 2 | 20 | 1 | 41 | 308 | 0 | 512 | 141 | 137 | 91 |
| Mars-March 1 | 322 | 102 | 1 | 0 | 47 | 6 | 2 | 6 | 18 | 3 | 50 | 358 | 0 | 589 | 143 | 165 | 115 |
| 8 | 335 | 80 | 1 | 1 | 33 | 4 | 5 | 3 | 12 | 2 | 48 | 332 | 1 | 499 | 134 | 122 | 107 |
| 15 | 283 | 82 | 0 | 1 | 27 | 6 | 0 | 5 | 18 | 1 | 89 | 321 | 0 | 520 | 151 | 140 | 124 |
| 22 | 256 | 80 | 0 | 3 | 29 | 3 | 4 | 7 | 19 | 0 | 86 | 254 | 0 | 472 | 170 | 140 | 149 |
| 29 | 300 | 78 | 1 | 2 | 32 | 10 | 2 | 7 | 22 | 2 | 73 | 225 | 0 | 534 | 118 | 151 | 140 |
| Avril-April 5 | 292 | 75 | 0 | 1 | 38 | 11 | 1 | 1 | 15 | 0 | 51 | 197 | 1 | 622 | 155 | 156 | 167 |
| 12 | 272 | 53 | 1 | 2 | 38 | 7 | 3 | 7 | 15 | 1 | 44 | 184 | 0 | 488 | 151 | 152 | 156 |
| 19 | 158 | 57 | 0 | 3 | 52 | 7 | 1 | 4 | 20 | 0 | 37 | 119 | 2 | 529 | 119 | 115 | 130 |
| 26 | 119 | 62 | 0 | 5 | 31 | 15 | 0 | 2 | 16 | 0 | 20 | 145 | 1 | 378 | 113 | 142 | 101 |
| Mai-May 3 | 307 | 71 | 0 | 15 | 41 | 14 | 2 | 3 | 15 | 2 | 15 | 155 | 0 | 515 | 120 | 144 | 185 |
| 10 | 354 | 80 | 0 | 30 | 23 | 6 | 2 | 7 | 12 | 0 | 7 | 120 | 0 | 420 | 154 | 164 | 237 |
| 17 | 286 | 68 | 1 | 45 | 33 | 7 | 3 | 6 | 24 | 0 | 6 | 115 | 1 | 400 | 128 | 166 | 128 |
| 24 | 265 | 62 | 0 | 52 | 31 | 6 | 8 | 0 | 23 | 0 | 10 | 150 | 0 | 356 | 132 | 140 | 126 |
| 31 | 198 | 71 | 0 | 77 | 34 | 7 | 1 | 3 | 11 | 0 | 15 | 137 | 0 | 274 | 111 | 170 | 138 |
| Juin-June 7 | 257 | 69 | 0 | 52 | 27 | 2 | 6 | 3 | 28 | 2 | 7 | 127 | 0 | 281 | 140 | 136 | 161 |
| 14 | 277 | 84 | 0 | 51 | 28 | 9 | 4 | 7 | 12 | 0 | 10 | 124 | 0 | 232 | 143 | 145 | 132 |
| 21 | 291 | 55 | 1 | 50 | 28 | 6 | 6 | 6 | 30 | 2 | 8 | 111 | 0 | 176 | 132 | 116 | 132 |
| 28 | 148 | 58 | 1 | 44 | 33 | 2 | 10 | 7 | 14 | 0 | 6 | 128 | 0 | 102 | 135 | 126 | 106 |
| Juillet-July 5 | 45 | 66 | 1 | 29 | 34 | 8 | 4 | 3 | 14 | 0 | 10 | 100 | 0 | 50 | 114 | 156 | 44 |
| 12 | 92 | 69 | 2 | 21 | 42 | 7 | 5 | 2 | 20 | 2 | 3 | 81 | 0 | 23 | 109 | 114 | 39 |
| 19 | 180 | 64 | 1 | 10 | 20 | 8 | 6 | 3 | 12 | 0 | 3 | 69 | 0 | 14 | 121 | 87 | 38 |
| 26 | 120 | 45 | 0 | 20 | 22 | 4 | 6 | 2 | 24 | 0 | 6 | 61 | 1 | 16 | 103 | 78 | 36 |
| Août-August 2 | 135 | 48 | 1 | 8 | 19 | 3 | 7 | 2 | 8 | 0 | 3 | 52 | 0 | 12 | 119 | 101 | 24 |
| 9 | 172 | 56 | 1 | 8 | 23 | 11 | 4 | 3 | 19 | 0 | 1 | 59 | 1 | 7 | 128 | 116 | 18 |
| 16 | 212 | 57 | 0 | 6 | 22 | 5 | 4 | 3 | 12 | 3 | 2 | 56 | 1 | 8 | 139 | 107 | 23 |
| 23 | 473 | 55 | 0 | 7 | 34 | 9 | 1 | 2 | 21 | 1 | 4 | 42 | 0 | 11 | 158 | 110 | 63 |
| 30 | 364 | 63 | 2 | 13 | 30 | 7 | 13 | 3 | 15 | 1 | 7 | 69 | 1 | 19 | 181 | 97 | 77 |
| Sept.-Sept. 6 | 272 | 81 | 3 | 7 | 39 | 11 | 4 | 3 | 15 | 1 | 5 | 66 | 0 | 14 | 212 | 109 | 83 |
| 13 | 250 | 66 | 2 | 3 | 25 | 9 | 5 | 1 | 20 | 1 | 7 | 77 | 1 | 23 | 201 | 130 | 82 |
| 20 | 214 | 83 | 1 | 7 | 39 | 6 | 5 | 1 | 9 | 1 | 3 | 79 | 0 | 24 | 208 | 100 | 87 |
| 27 | 173 | 82 | 0 | 5 | 36 | 8 | 8 | 3 | 21 | 0 | 13 | 78 | 1 | 27 | 235 | 113 | 85 |
| Octobre-October 4 | 197 | 87 | 0 | 5 | 33 | 9 | 4 | 0 | 31 | 2 | 4 | 91 | 0 | 23 | 252 | 94 | 107 |
| 11 | 256 | 113 | 2 | 3 | 34 | 5 | 4 | 1 | 23 | 1 | 3 | 78 | 0 | 38 | 323 | 113 | 149 |
| 18 | 269 | 103 | 2 | 4 | 28 | 9 | 4 | 2 | 18 | 1 | 15 | 121 | 0 | 40 | 272 | 91 | 189 |
| 25 | 326 | 117 | 1 | 1 | 26 | 5 | 1 | 2 | 16 | 1 | 9 | 152 | 1 | 52 | 254 | 98 | 188 |
| Nov.-Nov. 1 | 272 | 98 | 1 | 2 | 44 | 10 | 3 | 6 | 27 | 0 | 14 | 160 | 2 | 58 | 298 | 113 | 187 |
| 8 | 381 | 88 | 1 | 4 | 51 | 6 | 4 | 1 | 24 | 0 | 31 | 169 | 0 | 116 | 263 | 106 | 212 |
| 15 | 391 | 88 | 2 | 6 | 38 | 4 | 2 | 4 | 14 | 0 | 32 | 213 | 1 | 116 | 241 | 136 | 284 |
| 22 | 501 | 110 | 1 | 6 | 41 | 7 | 1 | 1 | 20 | 3 | 32 | 213 | 0 | 169 | 243 | 114 | 223 |
| 29 | 489 | 129 | 1 | 6 | 36 | 10 | 2 | 4 | 17 | 2 | 38 | 301 | 0 | 236 | 244 | 132 | 244 |
| Déc.-Dec. 6 | 442 | 111 | 0 | 3 | 43 | 9 | 8 | 4 | 19 | 1 | 30 | 286 | 0 | 226 | 226 | 116 | 256 |
| 13 | 465 | 119 | 0 | 2 | 36 | 3 | 6 | 6 | 12 | 0 | 38 | 248 | 0 | 286 | 218 | 141 | 263 |
| 20 | 402 | 111 | 2 | 4 | 33 | 6 | 5 | 3 | 18 | 1 | 40 | 255 | 2 | 329 | 224 | 144 | 197 |
| 27 | 216 | 99 | 0 | 4 | 24 | 10 | 5 | 1 | 20 | 2 | 24 | 192 | 0 | 153 | 207 | 115 | 72 |
| 1925 Janv.-Jan. 3 | 164 | 63 | 1 | 3 | 27 | 13 | 7 | 0 | 7 | 1 | 21 | 141 | 0 | 96 | 182 | 80 | 43 |

Autres maladies déclarées: — Other diseases reported:

| | Fièvre continue Continued fever | Polio-encéphalite aiguë Acute polio-encephalitis | Typhus exanthématique Typhus | Variole Smallpox |
|---|---|---|---|---|
| ** 1924. . . . . | 34 | 3 | 2 | 3 |

* La déclaration n'est pas obligatoire dans toutes les villes. — Notification is not compulsory in every city.
** 53 semaines. — 53 weeks.

## ESTHONIE — ESTHONIA

(Population: 1 113 621. E. 1 jan. 1924.)

**Nombre de cas de maladies à déclaration obligatoire déclarés en Esthonie en 1920-1924; par mois en 1924.**
**Number of Cases of Notifiable Diseases reported in Esthonia in 1920-1924; by months in 1924.**

*Sources:* Bulletin du Service d'Hygiène publique, Rapport sur les maladies épidémiques dans la République Esthonienne E. V. Tervishoiu peavalitsuse Arvanne, 1920 - 1924.

| Maladie — Disease | | Total 1920 | Total 1921 | Total 1922 | Total 1923 | Total 1924 | Jan. Jan. | Fév. Feb. | Mars Mar. | Avril April | Mai May | Juin June | Juil. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Anthrax | Anthrax | 3 | 1 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Botulisme | Botulism | 0 | 0 | 0 | 8 | 21 | 1 | 0 | 0 | 0 | 0 | 15 | 2 | 1 | 1 | 0 | 0 | 1 |
| Coqueluche | Whooping-cough | 232 | 215 | 1417 | 928 | 60 | 6 | 13 | 14 | 15 | 2 | 6 | 1 | 3 | 0 | 0 | 0 | 0 |
| Diphtérie | Diphtheria | 1207 | 825 | 517 | 408 | 461 | 44 | 50 | 43 | 25 | 47 | 23 | 22 | 30 | 30 | 42 | 54 | 51 |
| Dysenterie | Dysentery | 3459 | 1198 | 356 | 64 | 125 | 1 | 2 | 0 | 1 | 0 | 2 | 18 | 35 | 28 | 33 | 5 | 0 |
| Encéphalite léth. | Encephalitis leth. | — | 9 | 0 | 16 | 5 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Fièvre puerpérale | Puerperal fever | 10 | 28 | 40 | 23 | 24 | 2 | 4 | 3 | 2 | 4 | 3 | 1 | 1 | 3 | 1 | 0 | 0 |
| Fièvre récurrente | Relapsing fever | 978 | 118 | 104 | 8 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fièvre paratyph. | Paratyphoid fever | 56 | 78 | 110 | 75 | 169 | 5 | 5 | 19 | 8 | 15 | 12 | 16 | 15 | 27 | 24 | 11 | 12 |
| Fièvre typhoïde | Typhoid fever | 1094 | 1097 | 718 | 623 | 937 | 38 | 49 | 55 | 56 | 75 | 46 | 100 | 102 | 138 | 106 | 102 | 70 |
| Lèpre | Leprosy | 38 | 49 | 37 | 34 | 13 | 0 | 1 | 1 | 2 | 0 | 0 | 1 | 2 | 0 | 2 | 2 | 2 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | 9 | 12 | 14 | 12 | 12 | 0 | 2 | 4 | 2 | 0 | 0 | 1 | 0 | 0 | 2 | 1 | 0 |
| Rage humaine | Rabies | 5 | 5 | 2 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 |
| Rougeole | Measles | 1032 | 1785 | 2811 | 1930 | 203 | 11 | 65 | 7 | 19 | 62 | 14 | 5 | 3 | 1 | 2 | 2 | 12 |
| Scarlatine | Scarlet fever | 2549 | 1433 | 583 | 675 | 451 | 69 | 80 | 60 | 51 | 44 | 34 | 11 | 19 | 24 | 17 | 14 | 28 |
| Trachome | Trachoma | 186 | 492 | 467 | 513 | 528 | 49 | 32 | 76 | 45 | 54 | 23 | 42 | 20 | 39 | 72 | 47 | 29 |
| Tuberculose | Tuberculosis | 29 | 72 | 71 | 1525 | 1812 | 152 | 205 | 253 | 183 | 204 | 134 | 131 | 110 | 112 | 101 | 131 | 96 |
| Typhus exanth. | Typhus | 4125 | 356 | 247 | 63 | 43 | 2 | 0 | 2 | 20 | 9 | 5 | 0 | 0 | 0 | 0 | 0 | 5 |
| Varicelle | Chickenpox | — | 56 | 81 | 116 | 39 | 9 | 3 | 2 | 2 | 1 | 0 | 0 | 0 | 4 | 1 | 5 | 12 |
| Variole | Smallpox | 435 | 136 | 50 | 13 | 4 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Trichinose: 2 cas en 1921 et 1 cas en 1922. — Trichinosis: 2 cases in 1921 and 1 case in 1922.
Pas de cas de choléra asiatique ou de peste, 1920-1924. — No case of Asiatic cholera or plague, 1920-1924.

## ÉTAT LIBRE D'IRLANDE — IRISH FREE STATE

(Population: 3 161 000. E. 30 juin 1924.)

**Nombre de décès causés par certaines maladies transmissibles déclarés en 1922, 1923 et 1924, par trimestres.**
**Number of Deaths caused by Certain Communicable Diseases reported in 1922, 1923 and 1924, by quarters.**

*Source:* Rapport trimestriel des mariages, naissances et décès. — Quarterly Return of Marriages, Births and Deaths.

| Maladie — Disease | | 1922 Total | Trimestre — Quarter | | | | 1923 Total | Trimestre — Quarter | | | | 1924 Total | Trimestre — Quarter | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | I | II | III | IV | | I | II | III | IV | | I | II | III | IV |
| Coqueluche | Whooping-cough | 201 | 73 | 63 | 38 | 27 | 454 | 94 | 131 | 131 | 98 | 551 | 174 | 156 | 128 | 93 |
| Diarrhée et entérite* | Diarrhœal diseases* | 443 | 101 | 94 | 141 | 107 | 513 | 94 | 107 | 192 | 120 | 497 | 90 | 97 | 185 | 125 |
| Diphtérie | Diphtheria | 401 | 123 | 106 | 68 | 104 | 285 | 109 | 67 | 36 | 73 | 187 | 63 | 44 | 39 | 41 |
| Dysenterie | Dysentery | 9 | 1 | 6 | 1 | 1 | 15 | 3 | 6 | 5 | 1 | 6 | 3 | 2 | 0 | 1 |
| Fièvre typhoïde | Enteric fever | 96 | 29 | 23 | 23 | 21 | 142 | 40 | 34 | 28 | 40 | 98 | 20 | 24 | 25 | 29 |
| Rougeole | Measles | 458 | 121 | 195 | 89 | 53 | 171 | 55 | 61 | 34 | 21 | 210 | 48 | 132 | 17 | 13 |
| Scarlatine | Scarlet fever | 73 | 23 | 25 | 12 | 13 | 66 | 25 | 19 | 10 | 12 | 56 | 11 | 17 | 18 | 10 |
| Tuberculose, toutes formes | Tuberculosis, all forms | 4614 | 1325 | 1322 | 1046 | 921 | 4468 | 1224 | 1297 | 988 | 959 | 4471 | 1171 | 1321 | 1007 | 972 |
| Typhus exanth | Typhus | 18 | 3 | 2 | 11 | 2 | 19 | 1 | 10 | 6 | 2 | 8 | 0 | 5 | 3 | 0 |

Variole: pas de décès en 1922, 1923 et 1924 — Smallpox: no deaths in 1922, 1923 and 1924.
Les données pour les années 1922 et 1923 sont corrigées, celles pour 1924 sont provisoires. — Data for 1922 and 1923 are revised; those for 1924 are provisional.

* Au-dessous de deux ans. — Under two years.

## FINLANDE — FINLAND

(Population: 3 435 249. E. 31 déc. 1922.)

**Nombre de cas de maladies à déclaration obligatoire déclarés en 1919-1924; par quinzaines en 1924.**
**Number of Cases of Notifiable Diseases reported in 1919-1924; by half-months in 1924.**

*Sources:* Conspectus Morborum contagiosorum in Republica Finlandensi, 1923–1924. — Rapports spéciaux pour les années 1919, 1920, 1921, 1922. Special Reports for the years 1919-1922.

| Quinzaine: Half-month period: | | | Diphtérie Diphtheria | Dysenterie Dysentery | Encéphalite léthargique Encephalitis lethargica | Fièvre paratyphoïde Paratyphoid fever[1] | Fièvre typhoïde Typhoid fever[1] | Poliomyélite aiguë Acute poliomyelitis | Scarlatine Scarlet fever |
|---|---|---|---|---|---|---|---|---|---|
| Total 1919 | | | 8851 | 573 | — | 2569 | | 12 | 7395 |
| Total 1920 | | | 6330 | 573 | 239*a* | 1499 | | 19 | 1970 |
| Total 1921 | | | 3941 | 394 | 1095 | 1356 | | 15 | 1359 |
| Total 1922 | | | 1941 | 209 | 46 | 1298 | | 30 | 990 |
| Total 1923 | | | 1787 | 193 | 83 | 1654 | | 47 | 1148 |
| Total 1924 | | | 1306 | 189 | 43 | 1054 | 634 | 45 | 1842 |
| Janvier | January | 1-15 | 93 | 0 | 0 | 2 | 14 | 2 | 60 |
| | | 16-31 | 94 | 9 | 3 | 1 | 13 | 1 | 137 |
| Février | February | 1-15 | 87 | 0 | 3 | 3 | 13 | 0 | 79 |
| | | 16-29 | 68 | 4 | 2 | 7 | 13 | 0 | 128 |
| Mars | March | 1-15 | 64 | 0 | 2 | 6 | 7 | 0 | 104 |
| | | 16-31 | 78 | 3 | 4 | 5 | 8 | 0 | 136 |
| Avril | April | 1-15 | 53 | 0 | 4 | 3 | 17 | 2 | 122 |
| | | 16-30 | 51 | 4 | 2 | 13 | 27 | 2 | 133 |
| Mai | May | 1-15 | 31 | 5 | 0 | 7 | 5 | 3 | 92 |
| | | 16-31 | 42 | 5 | 3 | 20 | 22 | 4 | 84 |
| Juin | June | 1-15 | 35 | 7 | 2 | 5 | 28 | 0 | 40 |
| | | 16-30 | 32 | 0 | 1 | 8 | 12 | 1 | 52 |
| Juillet | July | 1-15 | 28 | 4 | 1 | 12 | 11 | 1 | 42 |
| | | 16-31 | 28 | 7 | 0 | 28 | 24 | 3 | 44 |
| Août | August | 1-15 | 35 | 14 | 1 | 33 | 24 | 1 | 27 |
| | | 16-31 | 33 | 40 | 1 | 57 | 64 | 6 | 25 |
| Septembre | September | 1-15 | 56 | 28 | 0 | 44 | 66 | 0 | 26 |
| | | 16-30 | 34 | 24 | 2 | 62 | 49 | 2 | 37 |
| Octobre | October | 1-15 | 58 | 15 | 0 | 113 | 57 | 2 | 41 |
| | | 16-31 | 50 | 10 | 2 | 270 | 59 | 5 | 63 |
| Novembre | November | 1-15 | 46 | 1 | 0 | 195 | 32 | 5 | 64 |
| | | 16-30 | 72 | 5 | 2 | 86 | 20 | 2 | 78 |
| Décembre | December | 1-15 | 68 | 4 | 3 | 43 | 29 | 1 | 151 |
| | | 16-31 | 70 | 0 | 5 | 31 | 20 | 2 | 77 |

Autres maladies déclarées: — Other diseases notified:

| | *Anthrax* *Anthrax* | *Fièvre récurrente* *Relapsing fever* | *Typhus exanthématique* *Typhus* | *Variole* *Smallpox* |
|---|---|---|---|---|
| 1919 . . . | 0 | 137 | 124 | 1759 |
| 1920 . . . | 0 | 8 | 1 | 77 |
| 1921 . . . | 2 | 2 | 33 | 27 |
| 1922 . . . | 0 | 1 | 1 *b* | 91 |
| 1923 . . . | 0 | 2 | 11 | 12 |
| 1924 . . . | 4 | 0 | 0 | 1 |

[1] Jusqu'au 15 juillet 1923, la fièvre typhoïde et la fièvre paratyphoïde étaient données ensemble; depuis cette date elles sont données séparément. Le total pour 1923 comprend 622 cas de fièvre paratyphoïde pour la période du 16 juillet au 31 décembre. — Up to July 15th, 1923, typhoid and paratyphoid fever were reported together, since this date separately. The total for 1923 includes 622 cases of paratyphoid fever for the period July 16th to December 31st.

*a* Pour le mois de décembre 1920. La déclaration n'était pas obligatoire avant le mois de décembre. — For the month of December 1920. Notification was not obligatory before December 1920.

*b* Courrier de la Russie. — *b* A courier from Russia.

Pas de cas de choléra asiatique; 2 cas en 1921 sur un navire anglais venant de Léninegrade. — No case of Asiatic cholera; 2 cases in 1921 on board an English vessel coming from Leningrad.

## FRANCE

(Population: 39 400 000. E. 30 juin 1922.)

**Nombre de cas de maladies à déclaration obligatoire déclarés en 1920-1924; par mois en 1924.**
**Number of Cases of Notifiable Diseases reported in 1920-1924; by months in 1924.**

*Source:* Rapport du Ministère de l'Hygiène. — Report from Ministry of Health.

| Maladie — Disease | | Total 1920 | Total 1921 | Total 1922 | Total 1923 | Total 1924 | Janv. Jan. | Fév. Feb. | Mars March | Avril April | Mai May | Juin June | Juillet July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Choléra et maladies cholériformes | Cholera and choleriform diseases | 24 | 99 | 32 | 21 | 19 | 1 | 1 | 0 | 0 | 0 | 1 | 6 | 3 | 4 | 0 | 1 | 2 |
| Diphtérie | Diphtheria | 14598 | 16981 | 12624 | 11033 | 11569 | 1122 | 1044 | 1177 | 1077 | 1096 | 940 | 868 | 635 | 574 | 788 | 963 | 1285 |
| Dysenterie | Dysentery | 381 | 1852 | 167 | 239 | 170 | 8 | 4 | 6 | 9 | 9 | 8 | 17 | 38 | 26 | 26 | 11 | 8 |
| *a*) Fièvre ondul. | *a*) Malta fever | — | — | — | — | 74 | — | — | 3 | 5 | 24 | 13 | 8 | 13 | 7 | 1 | 0 | 7 |
| Infections puerpérales | Puerperal infections | 492 | 436 | 168 | 202 | 278 | 24 | 19 | 34 | 24 | 29 | 27 | 26 | 15 | 16 | 30 | 14 | 20 |
| Fièvre typh. | Enteric fever | 7673 | 8116 | 4787 | 6297 | 6493 | 548 | 536 | 441 | 363 | 445 | 473 | 579 | 720 | 715 | 626 | 503 | 544 |
| Lèpre | Leprosy | — | — | — | — | 6 | 0 | 1 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 1 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | 417 | 398 | 379 | 381 | 562 | 59 | 72 | 71 | 60 | 54 | 43 | 28 | 32 | 29 | 34 | 38 | 42 |
| Ophtalmie d. nouveau-nés | Ophthalmia neonatorum | 53 | 44 | 31 | 23 | 20 | 1 | 2 | 5 | 2 | 4 | 1 | 0 | 0 | 2 | 1 | 1 | 1 |
| Peste | Plague | 9 | 0 | 3 | 14 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 1 | 0 | 0 |
| Poliomyélite | Poliomyelitis | 134 | 211 | 165 | 175 | 216 | 11 | 24 | 70 | 9 | 5 | 12 | 8 | 14 | 15 | 20 | 16 | 12 |
| Rougeole | Measles | 17489 | 16644 | 12019 | 34585 | 12838 | 712 | 928 | 1518 | 1916 | 2096 | 1636 | 1149 | 482 | 258 | 288 | 716 | 1139 |
| Scarlatine | Scarlet fever | 16839 | 13667 | 7435 | 5254 | 6595 | 487 | 496 | 640 | 683 | 727 | 689 | 611 | 361 | 308 | 376 | 522 | 695 |
| Suette miliaire | Miliary fever | 57 | 433 | 63 | 23 | 15 | 0 | 0 | 0 | 1 | 5 | 2 | 5 | 1 | 1 | 0 | 0 | 0 |
| *a*) Trachome | *a*) Trachoma | — | — | — | — | 73 | — | — | 15 | 12 | 15 | 11 | 4 | 5 | 3 | 3 | 2 | 3 |
| Typhus exant. | Typhus | 23 | 17 | 15 | 8 | 9 | 0 | 1 | 0 | 0 | 0 | 1 | 5 | 0 | 2 | 0 | 0 | 0 |
| Variole et varioloïde | Smallpox and varioloid | 392 | 341 | 172 | 195 | 210 | 12 | 25 | 19 | 23 | 15 | 32 | 17 | 20 | 9 | 15 | 8 | 15 |

Pas de cas de choléra asiatique ou de fièvre jaune, 1920-1924. — No case of Asiatic cholera or yellow fever, 1920-1924.
*a* A déclaration obligatoire depuis le 1er avril 1924. — Compulsorily notifiable from April 1st, 1924.

## FRANCE

### VILLE DE PARIS — CITY OF PARIS

(Population: 2 906 472. R. 1921.)

**Décès causés par certaines maladies déclarés en 1923-1924; par décades en 1924.**
**Deaths from Specified Diseases reported in 1923-1924; by ten-day periods in 1924.**

*Source:* Bulletin décadaire de statistique municipale.

| Décade finissant le: Ten-day period ending: | | Total des décès par toutes les causes Total deaths from all causes | Coqueluche Whooping-cough | Diphtérie et croup Diphtheria and croup | Fièvre typhoïde Enteric fever | Grippe Influenza | Pneumonie Pneumonia | Rougeole Measles | Scarlatine Scarlet fever | Autres affections de l'appareil respiratoire Other diseas. of the respiratory organs | Tuberculose de l'appareil respiratoire Tuberculosis of respiratory organs | Tuberculose autres formes Tuberculosis, other forms | Maladies organiques du cœur Organic heart diseases | Diarrhée et entérite de 0 à 2 ans Diarrhœa and enteritis up to 2 years |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | 1923 | 40325 | 188 | 136 | 194 | 169 | 1148 | 479 | 92 | 4458 | 6724 | 1122 | 3062 | 1216 |
| Total | 1924 | 41633 | 201 | 161 | 150 | 316 | 1108 | 338 | 50 | 5474 | 7054 | 1162 | 3323 | 921 |
| Janv.-January | 1-10 | 1634 | 4 | 2 | 5 | 66 | 69 | 0 | 1 | 370 | 203 | 40 | 137 | 25 |
| | 11-20 | 1628 | 3 | 5 | 8 | 77 | 75 | 0 | 2 | 339 | 201 | 30 | 124 | 21 |
| | 21-31 | 1461 | 2 | 7 | 4 | 42 | 47 | 0 | 0 | 269 | 239 | 24 | 118 | 29 |
| Février-Febr. | 1-10 | 1467 | 6 | 11 | 13 | 27 | 52 | 0 | 0 | 209 | 223 | 42 | 125 | 26 |
| | 11-20 | 1188 | 4 | 5 | 3 | 14 | 36 | 1 | 0 | 198 | 188 | 28 | 84 | 17 |
| | 21-29 | 1288 | 5 | 5 | 2 | 9 | 44 | 2 | 1 | 205 | 238 | 31 | 111 | 15 |
| Mars-March | 1-10 | 1570 | 2 | 6 | 7 | 14 | 50 | 2 | 1 | 264 | 251 | 37 | 127 | 37 |
| | 11-20 | 1408 | 5 | 9 | 5 | 3 | 43 | 14 | 2 | 258 | 217 | 32 | 120 | 22 |
| | 21-31 | 1525 | 12 | 9 | 2 | 6 | 65 | 19 | 3 | 266 | 265 | 52 | 108 | 17 |
| Avril-April | 1-10 | 1313 | 4 | 4 | 6 | 3 | 39 | 21 | 2 | 190 | 239 | 43 | 112 | 20 |
| | 11-20 | 1307 | 7 | 6 | 8 | 4 | 32 | 22 | 1 | 186 | 229 | 47 | 84 | 26 |
| | 21-30 | 1200 | 11 | 6 | 1 | 3 | 46 | 18 | 2 | 159 | 230 | 36 | 93 | 28 |
| Mai-May | 1-10 | 1222 | 12 | 6 | 6 | 0 | 40 | 27 | 3 | 123 | 252 | 41 | 103 | 25 |
| | 11-20 | 1006 | 6 | 5 | 1 | 3 | 26 | 24 | 5 | 106 | 168 | 32 | 78 | 13 |
| | 21-31 | 1100 | 15 | 5 | 5 | 1 | 20 | 27 | 1 | 117 | 178 | 48 | 76 | 21 |
| Juin-June | 1-10 | 1047 | 5 | 2 | 2 | 0 | 18 | 24 | 1 | 93 | 226 | 40 | 69 | 21 |
| | 11-20 | 1033 | 11 | 9 | 4 | 0 | 18 | 8 | 1 | 99 | 183 | 28 | 76 | 25 |
| | 21-30 | 933 | 13 | 2 | 2 | 1 | 18 | 13 | 1 | 80 | 165 | 27 | 60 | 21 |
| Juillet-July | 1-10 | 958 | 2 | 4 | 2 | 0 | 12 | 9 | 2 | 76 | 184 | 39 | 49 | 31 |
| | 11-20 | 979 | 5 | 1 | 3 | 2 | 17 | 10 | 2 | 55 | 192 | 39 | 66 | 30 |
| | 21-31 | 950 | 5 | 2 | 2 | 0 | 16 | 9 | 1 | 74 | 174 | 29 | 70 | 29 |
| Août-August | 1-10 | 833 | 7 | 1 | 6 | 0 | 12 | 3 | 1 | 80 | 163 | 21 | 62 | 46 |
| | 11-20 | 869 | 4 | 1 | 3 | 1 | 8 | 2 | 1 | 78 | 146 | 26 | 56 | 64 |
| | 21-31 | 1000 | 5 | 4 | 2 | 0 | 12 | 3 | 0 | 82 | 165 | 29 | 77 | 42 |
| Sept.-Sept. | 1-10 | 783 | 4 | 1 | 1 | 0 | 17 | 1 | 1 | 55 | 147 | 16 | 70 | 22 |
| | 11-20 | 880 | 11 | 3 | 3 | 1 | 12 | 5 | 2 | 80 | 149 | 22 | 80 | 31 |
| | 21-30 | 856 | 3 | 2 | 1 | 0 | 19 | 2 | 1 | 65 | 154 | 22 | 51 | 33 |
| Oct.-Oct. | 1-10 | 956 | 2 | 6 | 2 | 1 | 21 | 5 | 0 | 90 | 174 | 27 | 78 | 22 |
| | 11-20 | 946 | 1 | 2 | 2 | 0 | 20 | 2 | 0 | 85 | 151 | 27 | 87 | 14 |
| | 21-31 | 1035 | 3 | 5 | 2 | 1 | 19 | 8 | 1 | 102 | 156 | 32 | 88 | 25 |
| Nov.-Nov. | 1-10 | 920 | 1 | 3 | 6 | 0 | 19 | 5 | 1 | 106 | 152 | 22 | 77 | 19 |
| | 11-20 | 1144 | 3 | 3 | 3 | 3 | 23 | 6 | 0 | 126 | 216 | 30 | 101 | 17 |
| | 21-30 | 1216 | 3 | 4 | 1 | 3 | 25 | 5 | 4 | 182 | 196 | 25 | 119 | 24 |
| Déc.-Dec. | 1-10 | 1151 | 6 | 5 | 7 | 5 | 33 | 5 | 2 | 169 | 189 | 27 | 109 | 20 |
| | 11-20 | 1414 | 4 | 6 | 13 | 9 | 48 | 15 | 3 | 211 | 213 | 37 | 140 | 21 |
| | 21-31 | 1413 | 5 | 4 | 7 | 17 | 37 | 21 | 1 | 227 | 238 | 34 | 138 | 22 |

## GRÈCE — GREECE

(Population: 6 500 000. E. 1 janv. 1924.)

**Nombre de cas de maladies à déclaration obligatoire déclarés en 1923 et 1924; par mois en 1924.**

**Number of Cases of Notifiable Diseases reported in 1923 and 1924; by months in 1924.**

*Sources:* Rapport d'ensemble relatif a la campagne de vaccination exécutée en Grèce (Société des Nations, C. H. 149). Rapport du Ministère de l'Hygiène. — Report from the Ministry of Health.

| Maladie — Disease | | | Total 1923 | Total 1924 | Janv. Jan. | Fév. Feb. | Mars March | Avril April | Mai May | Juin June | Juillet July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Diphtérie | Diphtheria | C. | — | 192 | 12 | 18 | 17 | 6 | 14 | 11 | 17 | 10 | 15 | 18 | 23 | 31 |
| | | D. | — | 38 | 0 | 5 | 0 | 1 | 5 | 8 | 3 | 1 | 4 | 4 | 0 | 7 |
| Dysenterie bacillaire | Bacillary dysentery | C. | — | 182 | 2 | 1 | 2 | 0 | 0 | 4 | 39 | 40 | 15 | 52 | 9 | 18 |
| | | D. | — | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 1 | 0 | 8 |
| Encéphalite léthargique | Encephalitis lethar. | C. | — | 14 | 0 | 3 | 2 | 0 | 4 | 0 | 2 | 0 | 0 | 2 | 1 | 0 |
| | | D. | — | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Fièvre récurrente | Relapsing fever | C. | — | 91 | 0 | 0 | 0 | 35 | 54 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fièvre typhoïde | Typhoid fever | C. | — | 715 | 22 | 71 | 27 | 22 | 57 | 27 | 120 | 124 | 45 | 46 | 115 | 39 |
| | | D. | — | 123 | 0 | 5 | 1 | 0 | 5 | 3 | 13 | 8 | 75 | 8 | 0 | 5 |
| Lèpre | Leprosy | C. | — | 21 | 7 | 5 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 6 |
| Méningite cérébro-spinale | Cerebro spinal meningitis | C. | — | 155 | 5 | 19 | 20 | 5 | 22 | 12 | 38 | 2 | 7 | 7 | 9 | 9 |
| | | D. | — | 25 | 0 | 1 | 6 | 1 | 5 | 1 | 3 | 0 | 2 | 3 | 0 | 3 |
| Peste | Plague | C. | — | 69 | 2 | 0 | 0 | 6 | 2 | 6 | 15 | 25 | 6 | 5 | 2 | 0 |
| | | D. | — | 16 | 1 | 0 | 0 | 2 | 0 | 2 | 4 | 5 | 1 | 1 | 0 | 0 |
| Scarlatine | Scarlet fever | C. | — | 594 | 97 | 24 | 12 | 16 | 41 | 66 | 83 | 22 | 82 | 79 | 43 | 29 |
| | | D. | — | 127 | 0 | 10 | 3 | 0 | 5 | 7 | 48 | 5 | 35 | 9 | 0 | 5 |
| Typhus exanth. | Typhus | C. | 7607 | 266 | 45 | 29 | 21 | 27 | 89 | 14 | 3 | 8 | 11 | 8 | 5 | 6 |
| | | D. | — | 26 | 0 | 5 | 3 | 8 | 3 | 3 | 0 | 1 | 3 | 0 | 0 | 0 |
| Variole | Smallpox | C. | 2116 | 250 | 17 | 19 | 24 | 57 | 38 | 46 | 27 | 8 | 4 | 5 | 3 | 2 |
| | | D. | — | 50 | 2 | 7 | 9 | 10 | 3 | 4 | 14 | 1 | 0 | 0 | 0 | 0 |

## HONGRIE — HUNGARY

(Population: 8 158 000. E. 31 décembre 1923.)

**Nombre de cas de maladies à déclaration obligatoire et de décès dus à ces maladies déclarés en 1921-1924; par périodes de quinze jours en 1924.**

**Number of Cases of and Deaths from Notifiable Diseases reported in 1921-1924; by half-months in 1924.**

*Source:* Rapports sur les Maladies épidémiques.

| Quinzaine Half-month | Coqueluche Whooping-cough | | Diphtérie Diphtheria | | Dysenterie Dysentery | | Fièvre typhoïde Enteric fever | | Méningite céréb.-spin. Cereb.-spin. meningitis | | Oreillons Mumps | | Rougeole Measles | | Scarlatine Scarlet fever | | Septicémie puerpérale Puerperal Septicæmia | | Typhus exanthém. Typhus | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D | C. | D. | C. | D. |
| Total 1921 | 2656 | 137 | 3781 | 337 | 5230 | 485 | 6880 | 612 | 35 | 16 | 1844 | 2 | 51172 | 1070 | 21664 | 2866 | 161 | 51 | 73 | 8 |
| Total 1922 | 2669 | 127 | 2656 | 293 | 2455 | 332 | 5477 | 665 | 49 | 11 | 1631 | 5 | 7465 | 388 | 13243 | 2038 | 123 | 50 | 17 | 3 |
| Total 1923 | 2736 | 227 | 2635 | 276 | 4321 | 694 | 4880 | 669 | 29 | 11 | 3915 | 7 | 16413 | 386 | 6386 | 687 | 145 | 59 | 385 | 45 |
| Total 1924 | 5718 | 283 | 2814 | 291 | 3699 | 521 | 6994 | 907 | 23 | 16 | 1409 | 2 | 24906 | 327 | 5727 | 340 | 149 | 73 | 229 | 29 |
| Janv.-Jan. 15 | 147 | 11 | 136 | 10 | 34 | 7 | 335 | 41 | 1 | 1 | 190 | 0 | 1171 | 14 | 477 | 33 | 5 | 2 | 2 | 1 |
| 31 | 123 | 12 | 147 | 14 | 37 | 10 | 153 | 23 | 1 | 0 | 99 | 0 | 806 | 17 | 368 | 43 | 2 | 4 | 13 | 3 |
| Févr.-Febr. 15 | 92 | 8 | 130 | 10 | 23 | 1 | 134 | 22 | 0 | 1 | 149 | 0 | 653 | 12 | 252 | 19 | 6 | 1 | 23 | 2 |
| 29 | 130 | 11 | 148 | 14 | 21 | 3 | 141 | 32 | 0 | 0 | 154 | 0 | 825 | 21 | 269 | 27 | 4 | 4 | 4 | 6 |
| Mars-March 15 | 170 | 8 | 170 | 17 | 19 | 5 | 74 | 14 | 1 | 1 | 85 | 1 | 1214 | 7 | 242 | 31 | 3 | 1 | 11 | 1 |
| 31 | 169 | 13 | 156 | 24 | 26 | 0 | 78 | 16 | 3 | 2 | 47 | 0 | 635 | 17 | 217 | 13 | 8 | 4 | 28 | 4 |
| Avril-April 15 | 136 | 14 | 101 | 13 | 27 | 4 | 59 | 5 | 0 | 0 | 106 | 0 | 525 | 12 | 203 | 14 | 5 | 3 | 62 | 6 |
| 30 | 180 | 13 | 105 | 14 | 16 | 2 | 66 | 12 | 0 | 0 | 82 | 0 | 691 | 18 | 159 | 14 | 3 | 4 | 28 | 0 |
| Mai-May 15 | 323 | 10 | 113 | 8 | 19 | 5 | 70 | 9 | 2 | 2 | 120 | 0 | 1202 | 14 | 168 | 15 | 4 | 2 | 11 | 1 |
| 31 | 315 | 10 | 104 | 11 | 34 | 5 | 90 | 7 | 2 | 2 | 95 | 0 | 1823 | 18 | 187 | 10 | 10 | 6 | 27 | 1 |
| Juin-June 15 | 363 | 10 | 90 | 7 | 65 | 5 | 106 | 24 | 1 | 1 | 111 | 0 | 1434 | 32 | 137 | 11 | 8 | 1 | 12 | 0 |
| 30 | 472 | 22 | 65 | 5 | 88 | 12 | 123 | 11 | 0 | 0 | 17 | 0 | 991 | 8 | 109 | 4 | 5 | 5 | 0 | 0 |
| Juil.-July 15 | 344 | 8 | 65 | 5 | 116 | 16 | 128 | 11 | 1 | 0 | 17 | 0 | 765 | 7 | 87 | 3 | 8 | 2 | 0 | 0 |
| 31 | 493 | 18 | 75 | 3 | 209 | 17 | 253 | 21 | 2 | 1 | 25 | 0 | 556 | 10 | 91 | 7 | 6 | 6 | 0 | 0 |
| Août-Aug. 15 | 307 | 5 | 69 | 9 | 293 | 39 | 275 | 29 | 1 | 2 | 10 | 0 | 284 | 9 | 148 | 7 | 1 | 1 | 0 | 0 |
| 31 | 244 | 16 | 87 | 4 | 319 | 52 | 349 | 46 | 2 | 0 | 6 | 0 | 323 | 2 | 136 | 4 | 6 | 3 | 0 | 0 |
| Sept.-Sept. 15 | 182 | 12 | 74 | 6 | 316 | 43 | 454 | 31 | 0 | 0 | 10 | 0 | 267 | 4 | 179 | 5 | 10 | 2 | 0 | 0 |
| 30 | 201 | 12 | 113 | 8 | 348 | 31 | 559 | 60 | 1 | 1 | 19 | 1 | 367 | 4 | 245 | 9 | 5 | 3 | 0 | 0 |
| Oct.-Oct. 15 | 200 | 9 | 137 | 16 | 564 | 62 | 627 | 74 | 2 | 0 | 10 | 0 | 696 | 4 | 251 | 5 | 9 | 2 | 0 | 0 |
| 31 | 220 | 13 | 143 | 14 | 656 | 91 | 941 | 90 | 0 | 0 | 13 | 0 | 1373 | 8 | 321 | 15 | 8 | 5 | 0 | 0 |
| Nov.-Nov. 15 | 221 | 12 | 143 | 18 | 264 | 66 | 800 | 120 | 0 | 1 | 18 | 0 | 1998 | 20 | 357 | 12 | 7 | 0 | 0 | 0 |
| 30 | 191 | 7 | 157 | 15 | 139 | 31 | 546 | 83 | 2 | 0 | 9 | 0 | 2142 | 26 | 361 | 9 | 11 | 4 | 8 | 1 |
| Déc.-Dec. 15 | 321 | 15 | 148 | 20 | 43 | 11 | 410 | 67 | 1 | 1 | 10 | 0 | 2129 | 22 | 362 | 18 | 8 | 5 | 0 | 0 |
| 31 | 174 | 14 | 138 | 26 | 23 | 3 | 223 | 59 | 0 | 0 | 7 | 0 | 2036 | 21 | 401 | 12 | 7 | 3 | 0 | 0 |

Autres maladies déclarées: — Other diseases notified:

| | *Anthrax* *Anthrax* | | *Erysipèle* *Erysipelas* | | *Poliomyélite* *Poliomyelitis* | | *Variole* *Smallpox* | |
|---|---|---|---|---|---|---|---|---|
| | C. | D. | C. | D. | C. | D. | C. | D. |
| 1921 | 0 | 0 | 2 | 0 | 14 | 1 | 131 | 25 |
| 1922 | 0 | 0 | 0 | 0 | 3 | 1 | 2 | 0 |
| 1923 | 1 | 1 | 0 | 0 | 2 | 1 | 9 | 4 |
| 1924 | 7 | 0 | 1 | 0 | 0 | 0 | 1 | 0 |

Pas de cas de choléra asiatique, de peste ou de fièvre jaune, 1921-1924. — No cases of Asiatic cholera, plague or yellow fever, 1921-1924.

## IRLANDE DU NORD — NORTHERN IRELAND (Population: 1 284 000. E. 30 juin 1924.)

**Nombre de cas de maladies à déclaration obligatoire déclarés en 1924 et de décès causés par ces maladies en 1919-1924.**
**Number of Cases of Notifiable Diseases reported in 1924 and Deaths due to these Diseases in 1919-1924.**

*Sources:* Rapports trimestriels de 1924; rapports annuels du Registrar-General. — Quarterly Returns, 1924; Annual Reports of the Registrar-General.

| Maladie — Disease | | Cas — Cases | | | | | Décès — Deaths | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Total 1924 | Trimestre — Quarter | | | | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
| | | | I | II | III | IV | | | | | | |
| Coqueluche | Whooping-cough[1] | — | — | — | — | — | 158 | 185 | 366 | 194 | 305 | 258 |
| Diarrhée et entérite | Diarrhœal diseases[1] | — | — | — | — | — | — | 359 | 453 | 354 | 407 | 283 |
| Diphtérie | Diphtheria | 734 | 174 | 170 | 160 | 230 | 68 | 141 | 143 | 135 | 102 | 80 |
| Dysenterie | Dysentery | 1 | 0 | 0 | 1 | 0 | 9 | 2 | 2 | 3 | 3 | 0 |
| Encéphalite léthargique | Encephalitis lethargica[2] | 278 | 2 | 242 | 25 | 9 | — | 26 | 19 | 5 | 34 | 55 |
| Erysipèle | Erysipelas | 124 | 52 | 23 | 22 | 27 | — | — | — | 18 | 23 | 17 |
| Fièvre continue | Continued fever | 1 | 0 | 0 | 0 | 1 | — | — | — | — | — | — |
| Fièvre puerpér. | Puerperal fever[3] | 18 | 5 | 6 | 4 | 3 | 44 | 116 | 64 | 56 | 49 | 43 |
| Fièvre typhoïde et paratyph. | Enteric fever | 127 | 24 | 20 | 51 | 32 | 57 | 65 | 37 | 26 | 20 | 25 |
| Grippe | Influenza[1] | 129 | 117 | 1 | 0 | 11 | 1938 | 560 | 316 | 889 | 415 | 815 |
| Méningite cérébro-spin. | Cerebro-spinal meningitis[2] | 6 | 3 | 1 | 0 | 2 | 15 | 9 | 10 | 6 | 5 | 1 |
| Ophtalmie des nouveau-nés | Ophthalmia neonatorum[1] | 6 | 1 | 2 | 2 | 1 | — | — | — | — | — | — |
| Paludisme | Malaria | 3 | 0 | 1 | 0 | 2 | — | — | — | 0 | 3 | 4 |
| Pneumonie | Pneumonia[4] | 324 | 147 | 94 | 23 | 60 | 1644 | 1508 | 1199 | 1402 | — | 799 |
| Poliomyélite aiguë | Acute poliomyelitis[2] | 9 | 1 | 1 | 5 | 2 | — | — | — | 4 | 6 | 3 |
| Rougeole | Measles[3] | 216 | 162 | 28 | 7 | 19 | 158 | 278 | 44 | 52 | 204 | 204 |
| Scarlatine | Scarlet fever | 2898 | 474 | 418 | 741 | 1265 | 199 | 206 | 51 | 46 | 50 | 89 |
| Tuberculose | Tuberculosis[2] | — | — | — | — | — | 2804 | 2529 | 2244 | 2107 | 2037 | 1990 |
| Typhus exanth. | Typhus | 12 | 0 | 6 | 6 | 0 | 10 | 12 | 2 | 1 | 2 | 3 |
| Varicelle | Chickenpox[2] | 170 | 71 | 58 | 30 | 11 | — | — | — | — | — | — |
| Variole | Smallpox | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |

[1] La déclaration n'est pas obligatoire. — Not compulsorily notifiable.
[2] Déclaration obligatoire seulement dans certains districts. — Only notifiable in certain districts.
[3] Déclaration incomplète. — Notification incomplete.
[4] Comprend la pneumonie primaire aiguë et la pneumonie influenzale aiguë. — Including acute primary pneumonia and acute nfluenzal pneumonia.

## LETTONIE — LATVIA (Population: 1 886 000. E. 1 janvier 1923.)

**Nombre de cas de maladies à déclaration obligatoire déclarés en 1920-1924; par mois en 1924.**
**Number of Cases of Notifiable Diseases reported in 1920-1924; by months in 1924.**

*Source:* Conspectus Morborum Contagiosorum in Republica Latviensi.

| Maladie Disease | | Total 1920 | Total 1921 | Total 1922 | Total 1923 | Total 1924 | Jan. Jan. | Fév. Feb. | Mars Mar. | Avril April | Mai May | Juin June | Juil. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Anthrax | Anthrax | 0 | 9 | 7 | 2 | 4 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 |
| Coqueluche | Whooping-cough | 604 | 449 | 510 | 479 | 495 | 18 | 13 | 39 | 54 | 41 | 62 | 41 | 69 | 35 | 17 | 58 | 48 |
| Diphtérie | Diphtheria | 1159 | 964 | 698 | 645 | 594 | 51 | 69 | 72 | 53 | 41 | 45 | 36 | 39 | 51 | 41 | 50 | 46 |
| Dysenterie | Dysentery | 5479 | 1162 | 913 | 114 | 276 | 1 | 4 | 1 | 7 | 0 | 10 | 33 | 101 | 92 | 21 | 5 | 1 |
| Encéph. léthar. | Enceph. lethar. | | 6 | 4 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 |
| Erysipèle | Erysipelas | 13 | 21 | 23 | 23 | 47 | 3 | 3 | 4 | 2 | 1 | 0 | 5 | 3 | 2 | 8 | 5 | 11 |
| Fièvre puerpér. | Puerperal fever | 18 | 18 | 23 | 22 | 21 | 0 | 3 | 0 | 1 | 2 | 2 | 0 | 1 | 0 | 7 | 3 | 2 |
| Fièvre récurr. | Relapsing fever | 547 | 275 | 116 | 10 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 |
| Fièvre paratyph. | Paratyph. fever | 1615 | 1431 | 1011 | 1043 | 24 | 0 | 2 | 3 | 2 | 3 | 0 | 0 | 5 | 1 | 3 | 3 | 2 |
| Fièvre typhoïde | Typhoid fever | | | | | 1546 | 77 | 81 | 82 | 61 | 70 | 140 | 227 | 238 | 235 | 126 | 121 | 88 |
| Grippe | Influenza | 258 | 14 | 226 | 234 | 97 | 17 | 30 | 12 | 3 | 12 | 1 | 0 | 4 | 2 | 3 | 6 | 7 |
| Lèpre | Leprosy | 30 | 28 | 24 | 37 | 16 | 0 | 0 | 3 | 0 | 1 | 0 | 0 | 2 | 2 | 2 | 3 | 3 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | 88 | 31 | 22 | 19 | 20 | 0 | 0 | 3 | 1 | 3 | 3 | 5 | 0 | 1 | 0 | 4 | 0 |
| Oreillons | Mumps | 407 | 315 | 311 | 817 | 629 | 23 | 85 | 145 | 143 | 36 | 35 | 14 | 7 | 2 | 9 | 11 | 119 |
| Paludisme | Malaria | 57 | 192 | 66 | 50 | 15 | 0 | 1 | 0 | 1 | 5 | 1 | 2 | 2 | 1 | 1 | 0 | 1 |
| Pneumonie | Pneumonia | 19 | 9 | 16 | 20 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Rage humaine | Rabies | 10 | 20 | 15 | 21 | 14 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 8 | 0 | 0 |
| Rougeole | Measles | 1036 | 3062 | 715 | 315 | 1592 | 151 | 249 | 221 | 282 | 191 | 147 | 72 | 9 | 14 | 13 | 51 | 192 |
| Scarlatine | Scarlet fever | 2572 | 1532 | 1598 | 1555 | 1450 | 136 | 173 | 112 | 128 | 85 | 52 | 82 | 53 | 89 | 98 | 187 | 255 |
| Tétanos | Tetanus | 0 | 3 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Trachome | Trachoma | | 0 | 0 | 2 | 3 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Typhus exanth. | Typhus | 4631 | 1288 | 1480 | 430 | 290 | 35 | 13 | 81 | 39 | 43 | 26 | 9 | 8 | 6 | 5 | 11 | 14 |
| Varicelle | Chickenpox | 19 | 32 | 70 | 55 | 23 | 5 | 1 | 1 | 2 | 1 | 0 | 0 | 1 | 0 | 0 | 11 | 1 |
| Variole | Smallpox | 422 | 255 | 160 | 23 | 25 | 4 | 1 | 6 | 0 | 1 | 1 | 1 | 2 | 1 | 3 | 2 | 3 |

Autres maladies declarées: 1 cas de choléra asiatique en 1920 et 1 cas en 1921; 2 cas de scorbut en 1922, et 1 cas de rubéole en 1924 — Other diseases notified: 1 case of Asiatic cholera in 1920 and 1 case in 1921; 2 cases of scurvy in 1922, and 1 case of German measles in 1924.

## ITALIE — ITALY

(Population: *a* 39 659 944. E. 31 déc. 1923.)

**Nombre de cas de maladies à déclaration obligatoire déclarés en 1919-1924; par semaines en 1924.**
**Number of Notifiable Diseases reported in 1919-1924; by weeks in 1924.**

*Source:* Bollettino delle Malattie infettive nel Regno, Roma. Bollettino Sanitario del Ministero dell' Interno.

| Semaine finissant le: Week ending: | Diphtérie Diphtheria | Dysenterie Dysentery | Encéphalite léthargique Encephalitis lethargica | Fièvres typhoïde et paratyphoïde Enteric fever | Méningite cérébro-sp. Cerebro-sp. meningitis | Rougeole Measles | Scarlatine Scarlet fever | Variole Smallpox |
|---|---|---|---|---|---|---|---|---|
| Total 1919 | 11103 | 4973 | — | 23400 | 266 | 56401 | 6690 | 34365 |
| Total 1920 | 12619 | 2666 | — | 32487 | 110 | 94223 | 10209 | 26453 |
| Total 1921 | 12081 | 2201 | 278 | 35527 | 86 | 96725 | 11079 | 4644 |
| Total 1922 | 11347 | 1197 | 477 | 25316 | 66 | 46471 | 11965 | 534 |
| Total 1923 | 11183 | 1118 | 277 | 27626 | 368 | 75024 | 13418 | 495 |
| *a* Total 1924 | 14399 | 1062 | 618 | 24454 | 409 | 69239 | 16320 | 190 |
| Janvier — January 6 | 343 | 4 | 3 | 434 | 14 | 2229 | 346 | 0 |
| 13 | 314 | 1 | 8 | 360 | 9 | 1320 | 300 | 2 |
| 20 | 325 | 1 | 7 | 403 | 9 | 1284 | 288 | 3 |
| 27 | 335 | 2 | 10 | 244 | 3 | 1489 | 232 | 2 |
| Février — February 3 | 363 | 0 | 8 | 267 | 15 | 1661 | 273 | 6 |
| 10 | 380 | 1 | 14 | 260 | 14 | 1495 | 258 | 2 |
| 17 | 305 | 1 | 19 | 191 | 9 | 1387 | 209 | 2 |
| 24 | 398 | 2 | 11 | 217 | 12 | 1926 | 400 | 6 |
| Mars — March 2 | 307 | 0 | 17 | 182 | 18 | 1391 | 236 | 0 |
| 9 | 304 | 3 | 30 | 132 | 4 | 1651 | 191 | 2 |
| 16 | 377 | 0 | 30 | 177 | 10 | 1908 | 219 | 2 |
| 23 | 266 | 2 | 73 | 160 | 10 | 2026 | 185 | 2 |
| 30 | 328 | 1 | 32 | 162 | 7 | 2349 | 207 | 4 |
| Avril — April 6 | 355 | 2 | 54 | 195 | 15 | 2746 | 285 | 18 |
| 13 | 231 | 0 | 34 | 142 | 20 | 1840 | 192 | 7 |
| 20 | 276 | 5 | 31 | 135 | 6 | 2623 | 179 | 10 |
| 27 | 240 | 2 | 21 | 126 | 6 | 2105 | 151 | 1 |
| Mai — May 4 | 250 | 3 | 18 | 151 | 7 | 2354 | 215 | 2 |
| 11 | 242 | 5 | 22 | 175 | 12 | 2122 | 219 | 2 |
| 18 | 315 | 2 | 11 | 192 | 12 | 2116 | 247 | 4 |
| 25 | 248 | 5 | 9 | 218 | 8 | 2012 | 270 | 10 |
| Juin — June 1 | 186 | 5 | 7 | 190 | 13 | 1545 | 218 | 4 |
| 8 | 225 | 8 | 9 | 222 | 7 | 2030 | 325 | 18 |
| 15 | 169 | 5 | 12 | 190 | 7 | 1259 | 205 | 5 |
| 22 | 262 | 14 | 2 | 357 | 13 | 1707 | 432 | 10 |
| 29 | 134 | 37 | 4 | 283 | 5 | 1138 | 162 | 3 |
| Juillet — July 6 | 216 | 14 | 5 | 418 | 9 | 1388 | 340 | 6 |
| 13 | 165 | 27 | 7 | 374 | 8 | 1164 | 304 | 5 |
| 20 | 187 | 38 | 2 | 373 | 10 | 1301 | 294 | 5 |
| 27 | 149 | 38 | 6 | 488 | 8 | 1332 | 292 | 4 |
| Août — August 3 | 150 | 38 | 6 | 502 | 10 | 857 | 171 | 5 |
| 10 | 222 | 42 | 7 | 790 | 5 | 1015 | 439 | 2 |
| 17 | 232 | 57 | 4 | 689 | 6 | 681 | 342 | 7 |
| 24 | 198 | 53 | 2 | 880 | 1 | 409 | 360 | 5 |
| 31 | 242 | 69 | 5 | 1159 | 4 | 599 | 423 | 0 |
| Septembre-September 7 | 211 | 49 | 2 | 741 | 4 | 383 | 423 | 1 |
| 14 | 246 | 32 | 5 | 800 | 8 | 327 | 415 | 0 |
| 21 | 182 | 39 | 5 | 861 | 5 | 348 | 305 | 1 |
| 28 | 286 | 33 | 3 | 1041 | 4 | 462 | 379 | 5 |
| Octobre — October 5 | 310 | 45 | 2 | 1230 | 5 | 433 | 611 | 7 |
| 12 | 241 | 73 | 3 | 737 | 3 | 459 | 423 | 0 |
| 19 | 256 | 39 | 3 | 709 | 5 | 330 | 319 | 4 |
| 26 | 252 | 58 | 2 | 905 | 3 | 694 | 320 | 0 |
| Novembre-November 2 | 339 | 101 | 4 | 1065 | 7 | 578 | 464 | 0 |
| 9 | 362 | 24 | 6 | 1121 | 1 | 809 | 567 | 0 |
| 16 | 295 | 38 | 4 | 945 | 8 | 1035 | 411 | 1 |
| 23 | 307 | 9 | 5 | 596 | 9 | 869 | 344 | 1 |
| 30 | 397 | 11 | 7 | 475 | 3 | 958 | 449 | 2 |
| Décembre-December 7 | 342 | 11 | 4 | 503 | 5 | 1343 | 402 | 0 |
| 14 | 304 | 6 | 6 | 452 | 6 | 939 | 395 | 0 |
| 21 | 344 | 3 | 5 | 364 | 3 | 1242 | 283 | 1 |
| 28 | 486 | 4 | 12 | 471 | 4 | 1571 | 401 | 1 |

Autres maladies déclarées: — Other diseases notified:

| | Anthrax Anthrax | Paludisme Malaria | Pellagre Pellagra | Peste Plague | Rage humaine Rabies | Typhus exanthém. Typhus |
|---|---|---|---|---|---|---|
| 1919 . . . . . | 1498 | 247084 | 399 | 0 | 44 | 6051* |
| 1920 . . . . . | 1712 | 227747 | 256 | 0 | 39 | 113 |
| 1921 . . . . . | 1295 | 267589 | 194 | 19 | 57 | 60 |
| 1922 . . . . . | 2029 | 234656 | 303 | 22 | 82 | 0 |
| 1923 . . . . . | 2205 | 188937 | 66 | 1 | 113 | 2 |
| 1924 . . . . . | 2728 | 250896 | 68 | 3 | 150 | 2 |

* Dont 5416 cas parmi les prisonniers de guerre. — Of these, 5416 cases were among prisoners of war.
Pas de cas de choléra asiatique ou de fièvre jaune, 1919-1924. — No case of Asiatic cholera or yellow fever, 1919-1924.
*a* Y compris Trieste, Pola, le Trentin, Zara et Fiume. — Including Trieste, Pola, Trentino, Zara and Fiume.

## LITHUANIE — LITHUANIA

(Population: 2 035 121**. E. 31 déc. 1923.)

**Nombre de cas de maladies à déclaration obligatoire et de décès causés par ces maladies déclarés en 1920-1924; par mois en 1924.**
**Cases of and Deaths from Notifiable Diseases reported in 1920-1924; by months in 1924.**

*Sources:* Rapports du Département de la Santé publique, 1920-1924; rapport spécial du Bureau central de Statistique de la Lithuanie, 1923. — Reports from the Department of Public Health, 1920-1924; Special Report from the Central Office of Statistics of Lithuania, 1923.

| Maladie — Disease | | | Total 1920 | Total 1921 | Total 1922 | Total 1923 | Total 1924 | Jan. Jan | Fév. Feb. | Mars Mar. | Avril April | Mai May | Juin June | Juil. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Anthrax | Anthrax | C. | — | — | 3 | 14 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| | | D. | — | — | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Coqueluche | Whooping-cough | C. | — | — | — | 1131 | 573 | 58 | 48 | 57 | 41 | 33 | 45 | 52 | 63 | 43 | 73 | 36 | 24 |
| | | D. | — | — | — | 11 | 18 | 2 | 1 | 1 | 3 | 2 | 2 | 2 | 2 | 0 | 3 | 0 | 0 |
| Diphtérie | Diphtheria | C. | — | — | 292 | 228 | 223 | 21 | 20 | 18 | 13 | 8 | 17 | 13 | 14 | 14 | 19 | 37 | 29 |
| | | D. | — | — | 15 | 12 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 |
| Dysenterie | Dysentery | C. | 4435 | 1163 | 356 | 184 | 180 | 0 | 0 | 1 | 0 | 1 | 10 | 25 | 82 | 52 | 5 | 0 | 4 |
| | | D. | 500 | 123 | 12 | 15 | 30 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 17 | 12 | 0 | 0 | 0 |
| Encéphalite léthargique | Encephalitis lethargica | C. | — | — | — | 72 | 8 | 0 | 0 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| | | D. | — | — | — | 8 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Erysipèle | Erysipelas | C. | — | — | — | 345 | 274 | 23 | 26 | 24 | 28 | 24 | 21 | 21 | 25 | 28 | 20 | 12 | 22 |
| | | D. | — | — | — | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Fièvre puerpérale | Puerperal fever | C. | — | — | — | 180 | 157 | 9 | 17 | 8 | 12 | 23 | 9 | 5 | 25 | 15 | 9 | 8 | 17 |
| | | D. | — | — | — | 11 | 8 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 3 |
| Fièvre récurrente | Relapsing fever | C. | 732 | 1031 | 910 | 13 | 11 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 6 |
| | | D. | 32 | 19 | 24 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Fièvre typhoïde | Enteric fever | C. | 2421 | 1277 | 1140 | 799 | 758 | 59 | 71 | 50 | 67 | 37 | 37 | 61 | 61 | 101 | 96 | 72 | 46 |
| | | D. | 115 | 52 | 33 | 34 | 35 | 4 | 4 | 2 | 3 | 1 | 2 | 2 | 4 | 2 | 7 | 0 | 4 |
| *Gale | *Scabies | C. | — | — | — | 1803 | 1406 | 113 | 126 | | | | | | | | | | |
| Grippe | Influenza | C. | — | — | — | 3504 | 2854 | 381 | 395 | 161 | 150 | 122 | 97 | 88 | 83 | 120 | 125 | 115 | 106 |
| | | D. | — | — | — | 2 | 1 | 0 | 0 | 350 | 264 | 203 | 164 | 148 | 108 | 170 | 209 | 224 | 238 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | C. | — | — | 20 | 13 | 15 | 1 | 0 | 2 | 1 | 4 | 3 | 1 | 1 | 0 | 0 | 1 | 1 |
| | | D. | — | — | 5 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| *Oreillons | *Mumps | C. | — | — | — | 88 | 88 | 2 | 26 | 26 | 12 | 5 | 5 | 2 | 2 | 1 | 1 | 2 | 4 |
| *Paludisme | *Malaria | C. | — | — | — | 105 | 65 | 13 | 1 | 1 | 8 | 10 | 8 | 7 | 6 | 5 | 2 | 0 | 4 |
| Rougeole | Measles | C. | — | — | — | 374 | 2389 | 34 | 35 | 87 | 93 | 118 | 150 | 226 | 177 | 139 | 181 | 644 | 505 |
| | | D. | — | — | — | 7 | 63 | 0 | 3 | 3 | 2 | 3 | 2 | 7 | 7 | 5 | 8 | 14 | 9 |
| Scarlatine | Scarlet fever | C. | — | — | 437 | 230 | 399 | 13 | 35 | 19 | 14 | 3 | 5 | 25 | 14 | 11 | 43 | 109 | 108 |
| | | D. | — | — | 26 | 11 | 25 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 13 | 4 |
| *Trachome | *Trachoma | C. | — | — | — | 1764 | 2375 | 144 | 161 | 149 | 197 | 150 | 150 | 147 | 502 | 126 | 239 | 239 | 171 |
| Tuberculose | Tuberculosis | C. | — | — | — | 3653 | 3396 | 236 | 229 | 349 | 285 | 382 | 320 | 331 | 321 | 242 | 253 | 219 | 229 |
| | | D. | — | — | — | 70 | 126 | 7 | 13 | 6 | 6 | 16 | 10 | 9 | 14 | 11 | 12 | 10 | 12 |
| Typhus exanth. | Typhus | C. | 5302 | 3004 | 3409 | 830 | 618 | 53 | 84 | 218 | 88 | 93 | 21 | 24 | 9 | 4 | 2 | 9 | 13 |
| | | D. | 431 | 167 | 226 | 60 | 51 | 9 | 9 | 18 | 2 | 7 | 3 | 0 | 1 | 0 | 0 | 1 | 1 |
| *Varicelle | *Chickenpox | C. | — | — | — | 36 | 46 | 1 | 5 | 3 | 10 | 2 | 3 | 0 | 6 | 14 | 0 | 2 | 0 |
| Variole | Smallpox | C. | 1213 | 1035 | 345 | 25 | 58 | 1 | 0 | 36 | 1 | 17 | 2 | 0 | 0 | 0 | 0 | 0 | 1 |
| | | D. | 196 | 121 | 30 | 0 | 12 | 0 | 0 | 11 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Chancre mou | *Soft chancre | C. | — | — | — | 99 | 80 | 23 | 3 | 14 | 3 | 2 | 6 | 6 | 7 | 2 | 3 | 6 | 5 |
| *Gonorrhée | *Gonorrhœa | C. | — | — | — | 577 | 718 | 184 | 56 | 36 | 47 | 50 | 45 | 49 | 47 | 49 | 57 | 53 | 45 |
| *Syphilis | *Syphilis | C. | — | — | — | 580 | 733 | 205 | 72 | 42 | 24 | 50 | 91 | 37 | 40 | 61 | 35 | 46 | 30 |

35 cas et 11 décès de choléra asiatique en 1921; pas de cas ou de décès en 1920, 1922, 1923 et 1924. — 35 cases of and 11 deaths from Asiatic cholera in 1921; no case or death in 1920, 1922, 1923 and 1924.

2 cas de botulisme et 1 cas de lèpre en 1923; pas de décès. — 2 cases of botulism and 1 case of leprosy in 1923; no death.

Pas de cas ou de décès de peste en 1920-1924. — No case of or death from plague, 1920-1924.

* Pas de décès en 1923. — No death in 1923.

** Territoire de Klaipéda non compris. — Klaipeda Territory not included.

## NORVÈGE (villes) — NORWAY (Towns)

(Population: 798 439. E. 31 déc. 1923.)

**Nombre de cas de maladies à déclaration obligatoire et de décès dus à ces maladies déclarés dans les villes de Norvège en 1920-1924; par mois en 1924.**

**Number of Cases of and Deaths from Notifiable Diseases reported in the Towns of Norway in 1920-1924; by months in 1924.**

*Source :* Rapport spécial pour les années 1920-1923. Special Report for the years 1920-1923. Maanedlig Oversigt over Sundhetstilstanden i Byerne.

| Maladie — Disease | | | Total 1920 | Total 1921 | Total 1922 | Total 1923 | Total 1924 | Jan. Jan. | Fév. Feb. | Mars Mar. | Avril April | Mai May | Juin June | Juil. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Angine | Tonsillitis | C. | 13783 | 10559 | 11489 | 11205 | 9231 | 939 | 841 | 900 | 724 | 694 | 766 | 468 | 520 | 718 | 842 | 924 | 895 |
| | | D. | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bronchite aiguë | Ac. bronchitis | C. | 66133 | 54744 | 57387 | 49289 | 53254 | 6479 | 5507 | 4784 | 4010 | 3893 | 3413 | 2865 | 2401 | 3387 | 5006 | 5987 | 5522 |
| | | D. | 182 | 116 | 163 | 140 | 108 | 16 | 14 | 13 | 7 | 13 | 7 | 1 | 6 | 4 | 5 | 9 | 13 |
| Choléra nostras | Cholera nostras | C. | 9889 | 11265 | 9814 | 7137 | 12072 | 626 | 724 | 786 | 870 | 1025 | 914 | 1051 | 1551 | 1770 | 1137 | 820 | 798 |
| | | D. | 83 | 73 | 74 | 44 | 70 | 8 | 3 | 5 | 4 | 10 | 1 | 6 | 10 | 12 | 6 | 2 | 3 |
| Coqueluche | Whooping cough | C. | 6116 | 2137 | 6185 | 4580 | 2457 | 247 | 165 | 173 | 164 | 163 | 160 | 163 | 159 | 166 | 210 | 388 | 299 |
| | | D. | 53 | 31 | 80 | 38 | 14 | 2 | 2 | 1 | 0 | 1 | 2 | 2 | 1 | 0 | 0 | 1 | 2 |
| Diphtérie | Diphtheria | C. | 3582 | 1952 | 850 | 826 | 639 | 74 | 41 | 65 | 49 | 39 | 33 | 20 | 39 | 38 | 77 | 81 | 83 |
| | | D. | 112 | 50 | 30 | 32 | 15 | 0 | 1 | 4 | 1 | 1 | 2 | 0 | 1 | 0 | 0 | 3 | 2 |
| Dysenterie | Dysentery | C. | 237 | 168 | 92 | 24 | 36 | 1 | 0 | 0 | 1 | 2 | 1 | 2 | 6 | 1 | 12 | 4 | 6 |
| | | D. | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Encéphalite léth. | Encephalitis l. | C. | 38 | 55 | 7 | 10 | 10 | 0 | 4 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| | | D. | 9 | 13 | 3 | 1 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Erysipèle | Erysipelas | C. | 892 | 742 | 729 | 815 | 670 | 69 | 64 | 48 | 50 | 45 | 63 | 47 | 47 | 43 | 77 | 57 | 60 |
| | | D. | 19 | 17 | 10 | 20 | 14 | 0 | 1 | 0 | 1 | 2 | 4 | 4 | 1 | 0 | 0 | 1 | 0 |
| Fièvre puerpérale | Puerperal fever | C. | 62 | 44 | 26 | 34 | 34 | 3 | 5 | 3 | 4 | 2 | 2 | 3 | 0 | 2 | 2 | 6 | 2 |
| | | D. | 8 | 8 | 11 | 11 | 9 | 1 | 0 | 1 | 2 | 0 | 0 | 1 | 0 | 0 | 1 | 2 | 1 |
| Fièvre typhoïde | Typhoid fever | C. | 394 | 601 | 221 | 170 | 160 | 9 | 24 | 6 | 5 | 3 | 13 | 6 | 10 | 12 | 20 | 25 | 27 |
| | | D. | 22 | 23 | 16 | 13 | 7 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 2 | 0 |
| Grippe | Influenza | C. | 15980 | 5419 | 51747 | 23784 | 10353 | 1488 | 1371 | 1414 | 771 | 465 | 407 | 263 | 469 | 999 | 987 | 847 | 872 |
| | | D. | 105 | 10 | 187 | 131 | 33 | 3 | 10 | 6 | 7 | 2 | 1 | 0 | 0 | 2 | 1 | 1 | 0 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | C. | 16 | 15 | 6 | 12 | 8 | 3 | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 |
| | | D. | 8 | 7 | 4 | 7 | 5 | 3 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Oreillons | Mumps | C | 1222 | 3569 | 721 | 531 | 940 | 102 | 126 | 140 | 121 | 108 | 62 | 39 | 13 | 25 | 33 | 75 | 96 |
| | | D. | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Paludisme* | Malaria* | C. | 11 | 10 | 11 | 12 | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 |
| Pemphigus des nouveau-nés | Pemphigus of newborn | C. | 48 | 62 | 31 | 45 | 23 | 1 | 1 | 1 | 0 | 0 | 3 | 2 | 2 | 5 | 2 | 3 | 3 |
| | | D. | 3 | 2 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pleurésie | Pleurisy | C. | 1943 | 1800 | 1871 | 1828 | 1941 | 204 | 162 | 158 | 164 | 180 | 179 | 132 | 111 | 151 | 147 | 175 | 178 |
| | | D. | 5 | 3 | 9 | 12 | 10 | 1 | 0 | 1 | 1 | 1 | 2 | 1 | 0 | 0 | 1 | 1 | 1 |
| Pneumonie croupale | Croupous pneumonia | C. | 3035 | 2188 | 2684 | 2311 | 2424 | 260 | 210 | 274 | 228 | 195 | 205 | 120 | 96 | 112 | 166 | 290 | 258 |
| | | D. | 501 | 320 | 342 | 348 | 311 | 42 | 35 | 36 | 37 | 32 | 18 | 15 | 13 | 14 | 7 | 28 | 34 |
| Poliomyélite | Poliomyelitis | C. | 24 | 3 | 5 | 19 | 13 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 4 | 3 | 0 | 1 |
| | | D. | 2 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Rhumatisme articulaire | Rheumatic fever | C. | 1229 | 889 | 1076 | 1281 | 1025 | 93 | 107 | 106 | 100 | 104 | 107 | 79 | 49 | 58 | 53 | 71 | 98 |
| | | D | 11 | 11 | 11 | 13 | 10 | 0 | 1 | 0 | 1 | 2 | 2 | 0 | 1 | 1 | 1 | 0 | 1 |
| Rougeole | Measles | C. | 5936 | 5649 | 3647 | 2150 | 6169 | 255 | 260 | 290 | 543 | 757 | 551 | 326 | 109 | 250 | 975 | 1204 | 649 |
| | | D. | 25 | 29 | 27 | 10 | 28 | 0 | 1 | 3 | 2 | 8 | 6 | 0 | 1 | 1 | 3 | 2 | 1 |
| Rubéole* | Rubeola* | C. | 350 | 181 | 139 | 553 | 1067 | 78 | 114 | 131 | 136 | 88 | 128 | 56 | 159 | 96 | 52 | 12 | 17 |
| Scarlatine | Scarlet fever | C. | 889 | 483 | 913 | 1108 | 641 | 83 | 53 | 39 | 40 | 38 | 23 | 24 | 27 | 70 | 73 | 119 | 52 |
| | | D | 15 | 0 | 6 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Scorbut* | Scurvy* | C. | 0 | 1 | 4 | 2 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Septicémie pyémie | Septicæmia pyæmia | C | 127 | 111 | 99 | 83 | 79 | 7 | 5 | 3 | 3 | 7 | 4 | 8 | 9 | 8 | 10 | 10 | 5 |
| | | D. | 54 | 45 | 45 | 36 | 41 | 4 | 6 | 5 | 3 | 5 | 2 | 3 | 5 | 3 | 3 | 2 | 0 |
| Varicelle | Chickenpox | C. | 1609 | 2073 | 1575 | 1409 | 1628 | 239 | 156 | 117 | 121 | 114 | 119 | 93 | 69 | 71 | 138 | 189 | 202 |
| | | D. | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chancre mou* | Soft chancre* | C. | 526 | 487 | 427 | 278 | 230 | 14 | 29 | 14 | 12 | 17 | 14 | 31 | 22 | 12 | 29 | 27 | 9 |
| Gonorrhée* | Gonorrhœa* | C. | 4749 | 4245 | 3979 | 3655 | 3626 | 293 | 250 | 276 | 198 | 251 | 335 | 355 | 333 | 333 | 445 | 313 | 244 |
| Syphilis | Syphilis | C. | 1501 | 1285 | 1138 | 906 | 825 | 69 | 72 | 71 | 23 | 72 | 94 | 61 | 64 | 55 | 95 | 92 | 57 |
| | | D. | 13 | 8 | 10 | 13 | 5 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 |

* Pas de décès 1920-1924. — No death 1920-1924.
Typhus exanthématique: 1 cas en 1920; 2 cas et 2 décès en 1922. — Typhus: 1 case in 1920; 2 cases and 2 deaths in 1922.
Variole: 1 cas en 1921. — Smallpox: 1 case in 1921.
Pas de cas de choléra asiatique, 1920-1924. — No case of Asiatic cholera, 1920-1924.

## PAYS-BAS — NETHERLANDS

(Population: 7 314 229. E. 31 déc. 1924.)

**Nombre de cas de maladies à déclaration obligatoire et de décès dus à ces maladies déclarés en 1920-1924; par mois en 1924.**
**Number of Cases of and Deaths from Notifiable Diseases reported in 1920-1924; by months in 1924.**

*Source:* Verslagen en Mededeelingen betreffende de Volksgezondheid.

| Maladie — Disease | | | Total 1920 | Total 1921 | Total 1922 | Total 1923 | Total 1924 | Jan. Jan. | Fév. Feb. | Mars Mar. | Avril April | Mai May | Juin June | Juil. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Diphterie | Diphtheria | C. | 8091 | 7575 | 4740 | 4134 | 4447 | 344 | 384 | 398 | 359 | 315 | 309 | 324 | 249 | 324 | 429 | 473 | 539 |
| | | D. | 352 | 375 | 309 | 231 | 237 | 33 | 29 | 18 | 23 | 12 | 15 | 11 | 12 | 12 | 14 | 24 | 34 |
| Dysenterie | Dysentery | C. | 11 | 20 | 14 | 7 | 38 | 1 | 0 | 0 | 1 | 0 | 4 | 11 | 13 | 3 | 1 | 4 | 0 |
| | | D. | 3 | 9 | 11 | 4 | 5 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 |
| Encéphalite léthargique | Encephalitis* lethargica | C. | | — | — | — | 35 | 0 | 3 | 4 | 4 | 3 | 3 | 2 | 3 | 5 | 0 | 0 | 8 |
| | | D. | — | — | — | 41a | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 7 | 2 | 2 | 2 |
| Fièvre typhoïde | Enteric fever | C. | 2223 | 2004 | 1132 | 1391 | 1187 | 69 | 63 | 77 | 79 | 59 | 89 | 111 | 164 | 159 | 123 | 109 | 85 |
| | | D. | 308 | 282 | 133 | 175 | 161 | 13 | 10 | 14 | 14 | 9 | 14 | 13 | 8 | 24 | 16 | 14 | 12 |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | C. | 133 | 120 | 132 | 111 | 108 | 4 | 12 | 15 | 11 | 12 | 10 | 9 | 9 | 6 | 7 | 7 | 6 |
| | | D. | 71 | 61 | 69 | 66 | 56 | 2 | 5 | 9 | 4 | 6 | 4 | 2 | 5 | 3 | 6 | 3 | 7 |
| Poliomyélite | Poliomyelitis * | C. | — | — | — | 6a | 39 | 1 | 1 | 0 | 0 | 2 | 9 | 2 | 6 | 8 | 6 | 4 | 0 |
| | | D. | — | — | — | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 2 | 1 | 0 |
| Scarlatine | Scarlet fever | C. | 6208 | 4045 | 3301 | 3580 | 6636 | 362 | 338 | 341 | 363 | 292 | 381 | 522 | 491 | 687 | 895 | 923 | 1041 |
| | | D. | 129 | 58 | 35 | 28 | 54 | 1 | 2 | 1 | 2 | 3 | 0 | 3 | 3 | 4 | 10 | 6 | 19 |
| Typhus exanth. | Typhus | C. | 3 | 8 | 1 | 14 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | D. | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Variole | Smallpox | C. | 50 | 1 | 0 | 2 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | D. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

* A déclaration obligatoire depuis le 21 septembre 1923. — Notification compulsory since September 21st, 1923.
a Données pour la période du 21 sept. au 31 décembre 1923. — Data given for period from Sept. 21st, to Dec. 31st, 1923.
Pas de cas ni de décès de choléra asiatique, de peste ou de fièvre jaune, 1920-1924. — No case of or death from Asiatic cholera, plague or yellow fever, 1920-1924.

## POLOGNE — POLAND (Population: 26 874 222. E. 31 déc. 1924.)

**Nombre de cas et de décès dus aux maladies à déclaration obligatoire déclarés en 1919-1924; par semaines en 1924.**
**Number of Cases of and Deaths from Notifiable Diseases reported in 1919-1924; by weeks in 1924.**

*Source:* Rapport spécial de la Direction générale de la Santé publique. Special Report from General Public Health Office.

| Année et semaine finissant le: Year and week ending: | Coqueluche Whooping-cough | | Diphtérie Diphtheria | | Dysenterie Dysentery | | Encéphalite léthargique Encephalitis lethargica | | Erysipèle Erysipelas | | Fièvre puerpérale Puerperal fever | | Fièvre récurrente Relapsing fever | | Fièvre typhoïde Enteric fev. | | Paludisme Malaria | | Méningite Meningitis | | Rage humaine Rabies | Rougeole Measles | | Scarlatine Scarlet fev. | | Trachome Trachoma | Typhus exanthém. Typhus | | Variole Smallpox | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | D. | C. | D. | C. | D. | C. | C. | D. | C. | D. |
| Total 1919 | 1126 | 167 | 1815 | 219 | 7734 | 1226 | — | — | 425 | 76 | 341 | 111 | 3266 | 149 | 11421 | 1046 | 1513 | 13 | 330 | 101 | 1 | 6933 | 464 | 4690 | 547 | 1570 | 219088 | 18641 | 1864 | 264 |
| Total 1920 | 3674 | 300 | 3178 | 387 | 31020 | 5168 | — | — | 835 | 115 | 508 | 196 | 7188 | 293 | 21466 | 1972 | 2073 | 25 | 596 | 226 | 19 | 10831 | 405 | 16664 | 2256 | 1556 | 168097 | 22575 | 3948 | 687 |
| Total 1921 | 4356 | 301 | 4130 | 544 | 32944 | 4988 | 85 | 43 | 1331 | 118 | 539 | 222 | 13850 | 414 | 30067 | 2384 | 52965 | 41 | 477 | 281 | 22 | 23143 | 782 | 28164 | 3924 | 2435 | 49547 | 4199 | 5078 | 823 |
| Total 1922 | 8219 | 446 | 4228 | 414 | 14344 | 1739 | 121 | 27 | 1644 | 107 | 609 | 233 | 41207 | 1461 | 22056 | 1641 | 17611 | 13 | 533 | 269 | 34 | 23830 | 792 | 14717 | 1945 | 2737 | 42724 | 3199 | 2299 | 519 |
| Total 1923 | 4367 | 462 | 3694 | 426 | 5314 | 853 | 329 | 59 | 1483 | 77 | 682 | 252 | 2067 | 44 | 14037 | 1284 | 4770 | 4 | 597 | 332 | 36 | 22150 | 689 | 15746 | 1711 | 4061 | 11185 | 805 | 562 | 83 |
| Total 1924 | 4681 | 434 | 4838 | 494 | 10492 | 1533 | 89 | 34 | 1551 | 93 | 864 | 264 | 366 | 12 | 16288 | 1322 | 1881 | 1 | 414 | 256 | 43 | 10154 | 166 | 18030 | 1570 | 2954 | 7706 | 666 | 860 | 126 |
| Janv.—Jan. 5 | 36 | 6 | 60 | 4 | 11 | 0 | 1 | 0 | 23 | 1 | 5 | 3 | 6 | 0 | 202 | 14 | 6 | 0 | 2 | 5 | 0 | 372 | 10 | 251 | 28 | 4 | 130 | 11 | 15 | 1 |
| 12 | 26 | 11 | 68 | 14 | 12 | 0 | 4 | 2 | 22 | 1 | 22 | 0 | 3 | 0 | 271 | 30 | 9 | 0 | 2 | 1 | 0 | 303 | 5 | 333 | 25 | 12 | 132 | 12 | 20 | 4 |
| 19 | 37 | 5 | 74 | 16 | 10 | 1 | 0 | 0 | 24 | 3 | 22 | 10 | 14 | 0 | 252 | 23 | 6 | 0 | 8 | 6 | 0 | 246 | 7 | 320 | 44 | 53 | 210 | 14 | 16 | 5 |
| 26 | 39 | 4 | 73 | 7 | 9 | 2 | 2 | 2 | 18 | 1 | 19 | 8 | 7 | 0 | 225 | 14 | 10 | 0 | 10 | 7 | 0 | 259 | 11 | 347 | 44 | 49 | 249 | 23 | 43 | 9 |
| Fév. — Feb. 2 | 45 | 7 | 77 | 6 | 7 | 0 | 3 | 1 | 20 | 2 | 14 | 7 | 30 | 0 | 199 | 20 | 22 | 0 | 12 | 6 | 0 | 148 | 3 | 342 | 37 | 26 | 259 | 19 | 15 | 2 |
| 9 | 19 | 3 | 80 | 7 | 22 | 1 | 11 | 2 | 21 | 2 | 24 | 7 | 9 | 0 | 226 | 22 | 16 | 0 | 16 | 7 | 0 | 219 | 3 | 302 | 31 | 46 | 254 | 24 | 33 | 5 |
| 16 | 51 | 10 | 84 | 16 | 11 | 0 | 4 | 0 | 30 | 6 | 17 | 10 | 15 | 0 | 233 | 33 | 15 | 0 | 5 | 4 | 2 | 551 | 5 | 319 | 27 | 30 | 249 | 17 | 38 | 9 |
| 23 | 134 | 13 | 91 | 14 | 18 | 4 | 1 | 0 | 23 | 0 | 29 | 7 | 19 | 4 | 260 | 28 | 11 | 0 | 11 | 10 | 1 | 283 | 3 | 273 | 27 | 27 | 254 | 24 | 28 | 5 |
| Mars—March 1 | 63 | 10 | 73 | 9 | 12 | 0 | 2 | 1 | 25 | 5 | 23 | 13 | 17 | 1 | 189 | 22 | 17 | 0 | 9 | 9 | 0 | 244 | 1 | 279 | 32 | 71 | 251 | 22 | 54 | 19 |
| 8 | 89 | 16 | 85 | 14 | 37 | 1 | 2 | 2 | 36 | 1 | 17 | 10 | 18 | 0 | 153 | 17 | 11 | 0 | 8 | 5 | 0 | 345 | 2 | 252 | 29 | 34 | 261 | 23 | 51 | 8 |
| 15 | 50 | 1 | 86 | 12 | 20 | 2 | 1 | 2 | 33 | 1 | 19 | 2 | 13 | 0 | 171 | 16 | 8 | 0 | 8 | 6 | 0 | 230 | 5 | 239 | 32 | 78 | 339 | 25 | 53 | 7 |
| 22 | 53 | 12 | 93 | 14 | 16 | 3 | 4 | 1 | 38 | 2 | 22 | 5 | 8 | 1 | 156 | 11 | 16 | 0 | 12 | 3 | 1 | 238 | 3 | 264 | 25 | 30 | 451 | 34 | 57 | 9 |
| 29 | 35 | 5 | 76 | 14 | 22 | 0 | 2 | 1 | 25 | 4 | 21 | 6 | 8 | 0 | 155 | 12 | 41 | 0 | 12 | 6 | 1 | 149 | 3 | 235 | 24 | 43 | 298 | 36 | 49 | 5 |
| Avril—April 5 | 46 | 11 | 85 | 12 | 27 | 2 | 3 | 3 | 18 | 0 | 23 | 7 | 3 | 1 | 128 | 10 | 26 | 0 | 8 | 3 | 1 | 146 | 5 | 232 | 23 | 158 | 350 | 38 | 47 | 1 |
| 12 | 37 | 3 | 70 | 2 | 25 | 4 | 2 | 2 | 26 | 1 | 18 | 5 | 0 | 0 | 188 | 24 | 25 | 0 | 15 | 9 | 1 | 111 | 2 | 201 | 9 | 20 | 325 | 40 | 43 | 5 |
| 19 | 41 | 10 | 76 | 11 | 9 | 2 | 0 | 0 | 28 | 5 | 10 | 5 | 7 | 1 | 126 | 9 | 52 | 0 | 8 | 8 | 0 | 68 | 1 | 124 | 7 | 36 | 292 | 13 | 24 | 0 |
| 26 | 21 | 6 | 61 | 5 | 7 | 0 | 2 | 1 | 21 | 0 | 9 | 2 | 9 | 1 | 125 | 12 | 33 | 0 | 9 | 6 | 0 | 58 | 6 | 169 | 17 | 53 | 292 | 22 | 34 | 1 |
| Mai—May 3 | 30 | 3 | 62 | 12 | 20 | 1 | 3 | 1 | 30 | 2 | 12 | 4 | 7 | 0 | 162 | 17 | 71 | 0 | 9 | 6 | 0 | 58 | 4 | 147 | 9 | 30 | 291 | 31 | 16 | 1 |
| 10 | 24 | 5 | 67 | 9 | 20 | 3 | 2 | 0 | 26 | 1 | 20 | 11 | 5 | 1 | 133 | 18 | 58 | 1 | 8 | 4 | 3 | 75 | 1 | 176 | 23 | 52 | 294 | 39 | 24 | 7 |
| 17 | 39 | 4 | 85 | 3 | 16 | 0 | 2 | 2 | 25 | 2 | 16 | 7 | 4 | 0 | 157 | 18 | 69 | 0 | 13 | 2 | 1 | 170 | 5 | 175 | 10 | 105 | 277 | 25 | 12 | 4 |
| 24 | 35 | 6 | 59 | 3 | 19 | 2 | 3 | 0 | 15 | 0 | 10 | 6 | 3 | 0 | 163 | 13 | 76 | 0 | 9 | 6 | 3 | 266 | 1 | 197 | 17 | 48 | 204 | 21 | 33 | 3 |
| 31 | 53 | 8 | 60 | 1 | 23 | 0 | 0 | 0 | 14 | 2 | 9 | 4 | 4 | 0 | 147 | 18 | 88 | 0 | 9 | 3 | 0 | 240 | 6 | 171 | 13 | 134 | 166 | 17 | 17 | 0 |
| Juin—June 7 | 58 | 8 | 68 | 5 | 43 | 2 | 0 | 0 | 22 | 2 | 7 | 2 | 5 | 0 | 126 | 17 | 82 | 0 | 11 | 6 | 0 | 352 | 2 | 201 | 10 | 84 | 167 | 21 | 21 | 3 |
| 14 | 171 | 1 | 60 | 2 | 23 | 5 | 1 | 0 | 19 | 2 | 9 | 4 | 2 | 0 | 170 | 5 | 88 | 0 | 7 | 12 | 1 | 347 | 1 | 217 | 16 | 65 | 118 | 6 | 26 | 1 |
| 21 | 108 | 4 | 63 | 5 | 50 | 12 | 1 | 0 | 22 | 2 | 18 | 4 | 10 | 0 | 164 | 15 | 59 | 0 | 3 | 5 | 1 | 279 | 5 | 159 | 11 | 45 | 85 | 6 | 4 | 2 |
| 28 | 53 | 3 | 72 | 8 | 54 | 11 | 1 | 0 | 17 | 1 | 17 | 5 | 4 | 0 | 197 | 14 | 94 | 0 | 14 | 4 | 1 | 262 | 1 | 213 | 20 | 42 | 131 | 13 | 8 | 3 |
| Juillet—July 5 | 124 | 5 | 48 | 3 | 92 | 4 | 1 | 0 | 23 | 3 | 9 | 2 | 7 | 0 | 186 | 16 | 96 | 0 | 10 | 3 | 0 | 172 | 2 | 260 | 20 | 82 | 73 | 7 | 3 | 1 |
| 12 | 111 | 8 | 44 | 5 | 182 | 21 | 1 | 0 | 25 | 1 | 22 | 3 | 8 | 0 | 177 | 7 | 73 | 0 | 8 | 2 | 0 | 158 | 1 | 225 | 16 | 156 | 75 | 9 | 2 | 0 |
| 19 | 150 | 4 | 67 | 8 | 233 | 21 | 0 | 0 | 18 | 0 | 16 | 2 | 4 | 0 | 250 | 16 | 77 | 0 | 7 | 6 | 2 | 122 | 0 | 195 | 13 | 60 | 64 | 2 | 10 | 0 |
| 26 | 151 | 7 | 61 | 5 | 316 | 27 | 0 | 0 | 23 | 4 | 11 | 6 | 1 | 0 | 272 | 21 | 56 | 0 | 11 | 8 | 1 | 89 | 1 | 270 | 18 | 116 | 53 | 1 | 2 | 0 |
| Août—August 2 | 77 | 14 | 70 | 7 | 423 | 58 | 1 | 1 | 26 | 0 | 13 | 1 | 3 | 0 | 289 | 31 | 60 | 0 | 5 | 4 | 3 | 98 | 1 | 247 | 26 | 76 | 68 | 4 | 8 | 0 |
| 9 | 97 | 4 | 85 | 6 | 417 | 56 | 0 | 0 | 22 | 3 | 26 | 10 | 24 | 1 | 262 | 17 | 53 | 0 | 7 | 9 | 0 | 46 | 2 | 229 | 24 | 31 | 62 | 1 | 3 | 1 |
| 16 | 48 | 8 | 63 | 9 | 412 | 65 | 2 | 1 | 23 | 1 | 13 | 3 | 5 | 0 | 280 | 13 | 46 | 0 | 4 | 3 | 0 | 49 | 2 | 196 | 24 | 24 | 73 | 2 | 11 | 2 |
| 23 | 73 | 5 | 95 | 11 | 667 | 59 | 1 | 0 | 19 | 1 | 15 | 6 | 6 | 0 | 373 | 41 | 43 | 0 | 12 | 4 | 7 | 40 | 0 | 240 | 17 | 37 | 19 | 1 | 2 | 0 |
| 30 | 189 | 6 | 104 | 1 | 697 | 85 | 1 | 0 | 29 | 0 | 10 | 2 | 5 | 0 | 420 | 27 | 38 | 0 | 2 | 3 | 2 | 30 | 7 | 281 | 18 | 67 | 34 | 1 | 3 | 1 |
| Sept.—Sept. 6 | 90 | 7 | 86 | 7 | 541 | 68 | 1 | 1 | 30 | 2 | 17 | 6 | 4 | 0 | 495 | 34 | 33 | 0 | 7 | 5 | 0 | 38 | 1 | 369 | 34 | 150 | 24 | 0 | 3 | 0 |
| 13 | 130 | 17 | 90 | 8 | 439 | 69 | 0 | 0 | 37 | 1 | 14 | 1 | 11 | 1 | 566 | 40 | 25 | 0 | 5 | 5 | 1 | 21 | 1 | 361 | 40 | 27 | 46 | 2 | 1 | 0 |
| 20 | 143 | 12 | 92 | 3 | 445 | 76 | 1 | 1 | 40 | 1 | 25 | 4 | 3 | 0 | 619 | 43 | 47 | 0 | 3 | 4 | 0 | 72 | 0 | 444 | 46 | 70 | 46 | 4 | 1 | 0 |
| 27 | 188 | 26 | 132 | 8 | 279 | 51 | 0 | 0 | 35 | 1 | 15 | 7 | 8 | 0 | 613 | 42 | 33 | 0 | 5 | 7 | 1 | 75 | 2 | 535 | 30 | 45 | 40 | 0 | 2 | 1 |
| Oct.—Oct. 4 | 178 | 12 | 114 | 7 | 535 | 101 | 2 | 1 | 38 | 3 | 13 | 9 | 4 | 0 | 579 | 38 | 25 | 0 | 3 | 3 | 0 | 160 | 1 | 554 | 51 | 69 | 28 | 1 | 0 | 0 |
| 11 | 82 | 4 | 136 | 5 | 773 | 108 | 0 | 1 | 38 | 0 | 28 | 5 | 3 | 0 | 563 | 50 | 33 | 0 | 4 | 2 | 3 | 189 | 8 | 597 | 48 | 36 | 22 | 2 | 3 | 0 |
| 18 | 123 | 14 | 181 | 21 | 917 | 146 | 0 | 0 | 53 | 1 | 15 | 2 | 2 | 0 | 554 | 36 | 22 | 0 | 10 | 4 | 0 | 129 | 3 | 655 | 42 | 67 | 30 | 1 | 0 | 0 |
| 25 | 124 | 16 | 136 | 18 | 920 | 139 | 1 | 0 | 34 | 4 | 20 | 4 | 2 | 0 | 738 | 47 | 11 | 0 | 8 | 5 | 1 | 153 | 3 | 673 | 47 | 22 | 33 | 1 | 1 | 0 |
| Nov.—Nov. 1 | 63 | 5 | 139 | 11 | 595 | 107 | 0 | 1 | 42 | 5 | 15 | 4 | 1 | 0 | 573 | 39 | 17 | 0 | 3 | 5 | 0 | 82 | 2 | 556 | 44 | 34 | 24 | 2 | 3 | 0 |
| 8 | 123 | 13 | 182 | 23 | 418 | 85 | 2 | 1 | 52 | 3 | 15 | 4 | 4 | 0 | 720 | 44 | 7 | 0 | 4 | 2 | 1 | 121 | 2 | 680 | 49 | 122 | 54 | 5 | 2 | 1 |
| 15 | 93 | 12 | 157 | 13 | 250 | 57 | 1 | 0 | 40 | 1 | 17 | 3 | 5 | 0 | 594 | 46 | 10 | 0 | 8 | 4 | 0 | 235 | 4 | 591 | 56 | 27 | 41 | 5 | 3 | 0 |
| 22 | 103 | 12 | 116 | 16 | 136 | 30 | 2 | 1 | 42 | 3 | 19 | 3 | 2 | 0 | 437 | 38 | 7 | 0 | 8 | 4 | 0 | 231 | 7 | 693 | 58 | 54 | 43 | 2 | 0 | 0 |
| 29 | 182 | 22 | 143 | 11 | 97 | 21 | 2 | 0 | 50 | 1 | 23 | 4 | 3 | 0 | 498 | 30 | 6 | 0 | 7 | 4 | 1 | 276 | 2 | 588 | 44 | 46 | 38 | 5 | 5 | 0 |
| Déc.—Dec. 6 | 222 | 11 | 142 | 7 | 52 | 6 | 0 | 0 | 53 | 1 | 16 | 4 | 6 | 0 | 433 | 46 | 8 | 0 | 14 | 3 | 0 | 319 | 5 | 673 | 39 | 42 | 56 | 2 | 4 | 0 |
| 13 | 127 | 4 | 144 | 19 | 42 | 7 | 1 | 0 | 40 | 2 | 17 | 4 | 2 | 0 | 352 | 29 | 12 | 0 | 4 | 2 | 2 | 404 | 2 | 572 | 63 | 35 | 81 | 8 | 1 | 0 |
| 20 | 188 | 10 | 160 | 18 | 44 | 3 | 7 | 1 | 36 | 0 | 12 | 4 | 2 | 0 | 389 | 40 | 13 | 0 | 7 | 2 | 0 | 352 | 1 | 517 | 37 | 34 | 84 | 3 | 5 | 0 |
| 31 * | 138 | 7 | 142 | 19 | 27 | 5 | 5 | 1 | 62 | 2 | 16 | 7 | 11 | 0 | 378 | 39 | 11 | 0 | 10 | 4 | 1 | 474 | 5 | 694 | 71 | 50 | 167 | 19 | 1 | 0 |

Autres maladies déclarées: — Other diseases reported:

| Année Year | *Anthrax* Anthrax | | *Botulisme* Botulism | | *Choléra asiatique* Asiatic cholera | | *Malleus* Glanders | | *Trichinose* Trichinosis | |
|---|---|---|---|---|---|---|---|---|---|---|
| | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. |
| 1919 | 6 | 1 | 29 | 1 | 3 | 3 | 4 | 1 | 63 | 3 |
| 1920 | 37 | 10 | 37 | 12 | 57 | 31 | 6 | 4 | 38 | 0 |
| 1921 | 66 | 10 | 148 | 6 | 12 | 4 | 4 | 2 | 55 | 0 |
| 1922 | 56 | 10 | 157 | 35 | 121 | 34 | 22 | 4 | 35 | 9 |
| 1923 | 58 | 11 | 65 | 12 | 0 | 0 | 8 | 5 | 66 | 2 |
| 1924 | 69 | 17 | 114 | 32 | 0 | 0 | 1 | 1 | 48 | 2 |

Pas de cas de peste ou de lèpre en 1919–1924. — No case of plague or leprosy, 1919–1924.

* Période de onze jours. — Eleven-day period.

## ROUMANIE — ROUMANIA

(Population: 16 700 122. E. 1923.)

**Nombre de cas de maladies à déclaration obligatoire et de décès dus à ces maladies déclarés en 1920-1924; par mois en 1924.**

**Number of Cases of and Deaths from Notifiable Diseases reported in 1920-1924; by months in 1924.**

*Source:* Rapport spécial pour les années 1920-1924. — Special Report for the Years 1920-1924.

| Maladie — Disease | | | Total 1920 | Total 1921 | Total 1922 | Total 1923 | Total 1924 | Janv. Jan. | Févr. Feb. | Mars Mar. | Avril April | Mai May | Juin June | Juil. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Coqueluche | Whooping-cough | C. | 21842 | 6527 | 9615 | 18872 | 12709 | 621 | 513 | 898 | 1045 | 1363 | 1627 | 1938 | 2427 | 1086 | 642 | 101 | 448 |
| | | D. | 1195 | 406 | 660 | 1416 | 915 | 46 | 32 | 40 | 79 | 77 | 79 | 153 | 209 | 110 | 62 | 4 | 24 |
| Diphtérie | Diphtheria | C. | 2238 | 3050 | 1519 | 1445 | 1242 | 83 | 90 | 116 | 102 | 71 | 64 | 66 | 81 | 110 | 146 | 186 | 127 |
| | | D. | 193 | 312 | 220 | 159 | 189 | 12 | 14 | 24 | 12 | 10 | 3 | 12 | 13 | 19 | 33 | 17 | 20 |
| Dysenterie | Dysentery | C. | 3393 | 2958 | 996 | 1391 | 1303 | 18 | 7 | 12 | 7 | 13 | 21 | 150 | 268 | 198 | 569 | 28 | 12 |
| | | D. | 582 | 520 | 175 | 235 | 170 | 0 | 0 | 2 | 0 | 1 | 3 | 17 | 34 | 16 | 90 | 2 | 5 |
| Fièvre récurrente | Relapsing fever | C. | 19452 | 4663 | 444 | 152 | 56 | 1 | 4 | 1 | 3 | 4 | 2 | 11 | 0 | 0 | 0 | 3 | 19 |
| | | D. | 340 | 84 | 8 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Fièvre typhoïde | Enteric fever | C. | 6512 | 6777 | 5954 | 5273 | 7864 | 443 | 413 | 311 | 185 | 143 | 167 | 301 | 567 | 1126 | 1849 | 1497 | 862 |
| | | D. | 731 | 833 | 627 | 561 | 910 | 50 | 56 | 37 | 21 | 28 | 18 | 22 | 54 | 117 | 141 | 225 | 141 |
| Scarlatine | Scarlet fever | C. | 15562 | 43670 | 29027 | 23706 | 16696 | 1919 | 1618 | 1204 | 532 | 595 | 715 | 681 | 1011 | 1606 | 2571 | 2532 | 1712 |
| | | D. | 2033 | 5910 | 4075 | 3048 | 1694 | 323 | 235 | 182 | 84 | 64 | 100 | 71 | 91 | 121 | 144 | 162 | 117 |
| Typhus exanthém. | Typhus | C. | 42206 | 8189 | 3902 | 5175 | 3194 | 357 | 588 | 612 | 622 | 535 | 192 | 69 | 20 | 15 | 38 | 51 | 95 |
| | | D. | 4651 | 877 | 392 | 515 | 366 | 35 | 62 | 87 | 61 | 55 | 28 | 10 | 2 | 2 | 7 | 7 | 10 |
| Variole | Smallpox | C | 3467 | 2745 | 865 | 89 | 8 | 2 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| | | D. | 781 | 560 | 153 | 12 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Pas de cas de choléra asiatique ou de peste, 1920–1924. — No case of Asiatic cholera or plague, 1920–1924.

## ROYAUME DES SERBES, CROATES ET SLOVÈNES — KINGDOM OF THE SERBS, CROATS AND SLOVENES

(Population: 12 017 323. R. 31 janv. 1921.)

**Nombre de cas de maladies à déclaration obligatoire et de décès dus à ces maladies déclarés en 1920-1924; par semaines en 1924.**

**Number of Cases of and Deaths from Notifiable Diseases reported in 1920-1924; by weeks in 1924.**

*Sources:* Rapport sanitaire hebdomadaire. Bulletin Mensuel du Ministère de la Santé publique, Belgrade.

| Année et semaine finissant le: Year and week ending: | Coqueluche Whooping-cough | | Diphtérie Diphtheria | | Dysenterie Dysentery | | Fièvre paratyph. Paratyph. fever | | Fièvre typhoïde Typhoid fever | | Oreillons Mumps | | Paludisme Malaria | | Rougeole Measles | | Scarlatine Scarlet fever | | Typhus exanthém. Typhus | | Variole Smallpox | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. | C. | D. |
| Total 1920 | — | — | 1912 | 298 | 11138 | 1906 | — | — | 3851* | 444* | — | — | — | — | 17331 | 495 | 4940 | 882 | 1582 | 188 | 4156 | 9 |
| Total 1921 | — | — | 2667 | 349 | 13279 | 2392 | — | — | 4617* | 614* | — | — | 28750 | — | 25265 | 589 | 15221 | 2769 | 1054 | 130 | 2119 | 483 |
| Total 1922 | — | — | 1935 | 290 | 2878 | 371 | — | — | 3906* | 504* | — | — | 14600 | 161 | 5084 | 203 | 18088 | 3997 | 232 | 26 | 728 | 165 |
| Total 1923 | 3962 | 199 | 1963 | 313 | 3977 | 637 | — | — | 3549* | 493* | 1630 | 7 | 21414 | 153 | 13094 | 219 | 16521 | 3669 | 351 | 49 | 1042 | 199 |
| Total 1924 | 4664 | 177 | 1635 | 284 | 3110 | 345 | 404 | 19 | 5999 | 697 | 1600 | 10 | 48962 | 150 | 23673 | 342 | 9788 | 2038 | 319 | 22 | 330 | 64 |
| Janvier — 5 | 15 | 0 | 27 | 6 | 8 | 1 | 4 | 1 | 79 | 8 | 69 | 0 | 104 | 2 | 420 | 7 | 357 | 63 | 7 | 1 | 4 | 0 |
| January 12 | 15 | 2 | 20 | 3 | 8 | 1 | 3 | 1 | 53 | 13 | 18 | 0 | 103 | 1 | 379 | 4 | 379 | 102 | 0 | 0 | 1 | 0 |
| 19 | 22 | 1 | 67 | 12 | 9 | 1 | 4 | 0 | 58 | 8 | 27 | 0 | 165 | 2 | 860 | 15 | 379 | 90 | 7 | 0 | 0 | 0 |
| 26 | 14 | 0 | 39 | 9 | 10 | 3 | 36 | 2 | 50 | 11 | 6 | 0 | 154 | 0 | 705 | 7 | 343 | 66 | 5 | 0 | 14 | 6 |
| Février — 2 | 61 | 2 | 52 | 11 | 15 | 3 | 2 | 0 | 48 | 7 | 11 | 2 | 176 | 0 | 648 | 4 | 269 | 55 | 6 | 0 | 2 | 1 |
| February 9 | 14 | 0 | 37 | 10 | 8 | 3 | 3 | 0 | 62 | 8 | 47 | 0 | 140 | 2 | 1149 | 4 | 251 | 51 | 8 | 1 | 0 | 0 |
| 16 | 29 | 0 | 24 | 4 | 14 | 2 | 4 | 0 | 53 | 7 | 30 | 0 | 180 | 0 | 1129 | 6 | 228 | 52 | 16 | 3 | 3 | 1 |
| 23 | 59 | 17 | 36 | 4 | 5 | 1 | 12 | 0 | 41 | 9 | 28 | 0 | 116 | 1 | 917 | 17 | 264 | 68 | 20 | 1 | 8 | 2 |
| Mars — 1 | 56 | 1 | 29 | 6 | 15 | 0 | 2 | 0 | 53 | 16 | 53 | 0 | 158 | 0 | 1048 | 8 | 167 | 42 | 13 | 0 | 8 | 2 |
| March 8 | 37 | 0 | 37 | 6 | 3 | 0 | 3 | 0 | 57 | 12 | 194 | 1 | 141 | 3 | 1165 | 13 | 203 | 29 | 11 | 0 | 24 | 5 |
| 15 | 66 | 3 | 35 | 11 | 4 | 0 | 0 | 0 | 39 | 7 | 17 | 0 | 100 | 0 | 927 | 8 | 159 | 39 | 6 | 0 | 12 | 0 |
| 22 | 65 | 1 | 41 | 4 | 23 | 1 | 1 | 0 | 29 | 3 | 85 | 0 | 127 | 0 | 1217 | 13 | 223 | 48 | 4 | 0 | 23 | 1 |
| 29 | 121 | 5 | 30 | 6 | 7 | 0 | 2 | 0 | 29 | 6 | 90 | 0 | 219 | 0 | 1150 | 30 | 165 | 24 | 10 | 2 | 3 | 5 |
| Avril — 5 | 52 | 3 | 25 | 4 | 9 | 0 | 2 | 0 | 31 | 3 | 37 | 0 | 155 | 0 | 767 | 19 | 111 | 25 | 12 | 1 | 0 | 2 |
| April 12 | 76 | 7 | 27 | 2 | 3 | 0 | 2 | 1 | 31 | 14 | 32 | 0 | 256 | 1 | 677 | 22 | 116 | 24 | 1 | 0 | 17 | 2 |
| 19 | 108 | 6 | 20 | 3 | 2 | 0 | 5 | 0 | 31 | 5 | 99 | 0 | 209 | 3 | 657 | 9 | 145 | 36 | 5 | 1 | 17 | 1 |
| 26 | 103 | 9 | 16 | 3 | 5 | 0 | 10 | 0 | 27 | 4 | 29 | 0 | 179 | 0 | 436 | 9 | 108 | 20 | 30 | 0 | 23 | 6 |
| Mai — 3 | 96 | 5 | 20 | 2 | 1 | 0 | 0 | 0 | 36 | 3 | 31 | 0 | 332 | 2 | 401 | 10 | 67 | 13 | 13 | 1 | 5 | 0 |
| May 10 | 70 | 4 | 26 | 6 | 6 | 0 | 0 | 0 | 38 | 3 | 18 | 0 | 322 | 0 | 337 | 10 | 102 | 15 | 27 | 0 | 28 | 7 |
| 17 | 140 | 2 | 17 | 1 | 10 | 3 | 4 | 0 | 55 | 5 | 7 | 0 | 377 | 1 | 978 | 8 | 148 | 18 | 5 | 1 | 54 | 8 |
| 24 | 89 | 2 | 22 | 5 | 6 | 0 | 2 | 0 | 23 | 3 | 123 | 0 | 370 | 2 | 566 | 6 | 95 | 27 | 9 | 0 | 18 | 3 |
| 31 | 56 | 1 | 30 | 6 | 11 | 0 | 1 | 0 | 35 | 4 | 34 | 0 | 399 | 0 | 686 | 4 | 68 | 20 | 7 | 1 | 6 | 1 |
| Juin — 7 | 101 | 5 | 25 | 1 | 10 | 0 | 8 | 0 | 29 | 3 | 15 | 3 | 879 | 0 | 746 | 12 | 74 | 11 | 1 | 2 | 17 | 3 |
| June 14 | 43 | 1 | 28 | 5 | 6 | 0 | 2 | 0 | 22 | 1 | 47 | 0 | 802 | 0 | 504 | 7 | 62 | 12 | 11 | 0 | 4 | 1 |
| 21 | 120 | 4 | 26 | 7 | 12 | 2 | 4 | 0 | 33 | 2 | 11 | 0 | 561 | 3 | 343 | 0 | 77 | 28 | 2 | 0 | 9 | 2 |
| 28 | 53 | 1 | 15 | 1 | 20 | 2 | 4 | 0 | 29 | 5 | 3 | 0 | 1116 | 1 | 247 | 12 | 71 | 17 | 3 | 0 | 12 | 2 |
| Juillet — 5 | 78 | 0 | 26 | 3 | 25 | 2 | 8 | 0 | 44 | 4 | 11 | 1 | 1292 | 4 | 331 | 5 | 120 | 22 | 2 | 0 | 3 | 0 |
| July 12 | 105 | 2 | 23 | 3 | 28 | 3 | 10 | 0 | 54 | 5 | 15 | 2 | 1216 | 2 | 98 | 0 | 142 | 25 | 12 | 1 | 4 | 1 |
| 19 | 111 | 4 | 26 | 0 | 75 | 7 | 5 | 0 | 80 | 7 | 15 | 0 | 1220 | 0 | 89 | 2 | 118 | 27 | 5 | 0 | 1 | 0 |
| 26 | 64 | 5 | 24 | 9 | 79 | 6 | 7 | 0 | 61 | 3 | 15 | 0 | 1778 | 3 | 69 | 1 | 86 | 18 | 0 | 0 | 1 | 2 |
| Août — 2 | 86 | 5 | 28 | 5 | 116 | 10 | 13 | 0 | 71 | 9 | 9 | 0 | 1732 | 5 | 51 | 5 | 82 | 14 | 2 | 0 | 0 | 0 |
| August 9 | 176 | 1 | 21 | 2 | 128 | 12 | 7 | 0 | 80 | 5 | 15 | 0 | 2439 | 4 | 51 | 2 | 111 | 18 | 7 | 2 | 2 | 0 |
| 16 | 134 | 3 | 23 | 5 | 126 | 9 | 10 | 0 | 75 | 9 | 7 | 0 | 1837 | 7 | 39 | 0 | 189 | 39 | 0 | 0 | 1 | 0 |
| 23 | 64 | 3 | 21 | 3 | 146 | 11 | 13 | 1 | 90 | 11 | 2 | 0 | 2501 | 13 | 70 | 0 | 175 | 40 | 0 | 0 | 1 | 0 |
| 30 | 124 | 7 | 21 | 2 | 233 | 23 | 10 | 1 | 127 | 13 | 3 | 0 | 2808 | 4 | 59 | 0 | 181 | 40 | 7 | 0 | 0 | 0 |
| Sept. — 6 | 136 | 4 | 25 | 2 | 212 | 21 | 11 | 0 | 142 | 6 | 13 | 0 | 2163 | 2 | 49 | 3 | 192 | 37 | 1 | 0 | 1 | 0 |
| Sept. 13 | 48 | 4 | 26 | 3 | 208 | 18 | 16 | 1 | 217 | 18 | 9 | 0 | 2934 | 7 | 28 | 1 | 186 | 41 | 1 | 0 | 0 | 0 |
| 20 | 80 | 3 | 44 | 4 | 191 | 19 | 18 | 1 | 253 | 17 | 4 | 0 | 2717 | 3 | 115 | 0 | 204 | 51 | 0 | 0 | 3 | 0 |
| 27 | 131 | 3 | 28 | 3 | 172 | 26 | 17 | 0 | 254 | 18 | 6 | 0 | 1616 | 5 | 116 | 3 | 228 | 33 | 0 | 0 | 1 | 0 |
| Oct. — 4 | 153 | 3 | 34 | 9 | 197 | 20 | 4 | 1 | 334 | 25 | 7 | 1 | 1904 | 13 | 134 | 3 | 296 | 52 | 0 | 0 | 0 | 0 |
| Oct. 11 | 300 | 0 | 22 | 1 | 168 | 18 | 25 | 1 | 250 | 23 | 4 | 0 | 842 | 3 | 205 | 1 | 186 | 38 | 0 | 0 | 0 | 0 |
| 18 | 170 | 6 | 39 | 5 | 228 | 30 | 19 | 0 | 317 | 39 | 1 | 0 | 923 | 7 | 156 | 3 | 286 | 53 | 1 | 0 | 0 | 0 |
| 25 | 47 | 1 | 54 | 7 | 153 | 25 | 30 | 0 | 361 | 29 | 2 | 0 | 3390 | 3 | 194 | 2 | 267 | 60 | 3 | 0 | 0 | 0 |
| Nov. — 1 | 128 | 14 | 51 | 7 | 110 | 20 | 20 | 1 | 346 | 42 | 14 | 0 | 595 | 6 | 211 | 3 | 247 | 41 | 0 | 0 | 0 | 0 |
| Nov. 8 | 63 | 4 | 34 | 11 | 78 | 13 | 6 | 0 | 296 | 40 | 12 | 0 | 2261 | 15 | 171 | 7 | 249 | 43 | 1 | 0 | 0 | 0 |
| 15 | 82 | 3 | 32 | 9 | 46 | 5 | 12 | 2 | 311 | 29 | 5 | 0 | 2224 | 3 | 316 | 3 | 200 | 43 | 1 | 0 | 0 | 0 |
| 22 | 163 | 3 | 52 | 5 | 63 | 7 | 1 | 1 | 269 | 35 | 78 | 0 | 268 | 2 | 252 | 8 | 230 | 43 | 3 | 0 | 0 | 0 |
| 29 | 134 | 3 | 36 | 9 | 31 | 6 | 7 | 0 | 206 | 24 | 5 | 0 | 435 | 5 | 251 | 0 | 197 | 31 | 4 | 1 | 0 | 0 |
| Déc. — 6 | 138 | 3 | 38 | 4 | 16 | 7 | 4 | 1 | 202 | 28 | 19 | 0 | 386 | 1 | 230 | 6 | 150 | 23 | 5 | 0 | 0 | 0 |
| Dec. 13 | 103 | 5 | 52 | 15 | 27 | 2 | 3 | 1 | 190 | 32 | 125 | 0 | 331 | 3 | 334 | 7 | 312 | 76 | 8 | 1 | 0 | 0 |
| 20 | 69 | 3 | 43 | 8 | 13 | 1 | 6 | 1 | 174 | 25 | 38 | 0 | 243 | 4 | 522 | 7 | 260 | 60 | 16 | 2 | 0 | 0 |
| 27 | 96 | 3 | 41 | 12 | 11 | 1 | 2 | 1 | 124 | 31 | 5 | 0 | 67 | 2 | 473 | 6 | 263 | 75 | 1 | 0 | 0 | 0 |

| | 1920 | 1921 | 1922 | 1923 | 1924 |
|---|---|---|---|---|---|
| Fièvre récurrente: | 23 cas, 0 décès; | 69 cas, 4 décès; | 21 cas, 6 décès; | 13 cas, 0 décès; | 15 cas, 0 décès. |
| Relapsing fever: | 23 cases, 0 death; | 69 cases, 4 deaths; | 21 cases, 6 deaths; | 13 cases, 0 death; | 15 cases 0 death. |

* Les données pour la fièvre paratyphoïde sont comprises dans ces totaux. — Data for paratyphoid fever are included in these totals.

## RUSSIE — RUSSIA

(Population: 134 853 752. E. 1923.)

**Nombre de cas de certaines maladies transmissibles déclarés en 1923-1924.**
**Number of Cases of Certain Communicable Diseases reported in 1923-1924.**

*Source:* Rapports du Service statistique du Commissariat du Peuple pour la Santé publique. — Reports from Statistical Division, People's Health Commissariat.

| Divisions | Anthrax Anthrax | | Choléra asiatique Asiatic cholera | | Diphtérie Diphtheria | | Dysenterie Dysentery | | Encéphal. léthar. Encephal. lethar. | | Fièvre récurr. Relapsing fever | | Fièvre typh. Enteric fever | | Divisions |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1923 | 1924 | 1923 | 1924 | 1923 | 1924 | 1923 | 1924 | 1923 | 1924 | 1923 | 1924 | 1923 | 1924 | |
| Région du nord-est. | 25 | 8 | 0 | 0 | 184 | 379 | 1.497 | 4.151 | 7 | 2 | 1.429 | 425 | 1.145 | 1.414 | North-East. Region |
| Région d. nord-ouest | 79 | 23 | 0 | 0 | 1.539 | 1.902 | 3.843 | 11.594 | 61 | 126 | 1.154 | 390 | 2.743 | 5.185 | North-West. Region |
| Région de l'ouest . | 86 | 219 | 0 | 0 | 3.438 | 4.770 | 9.082 | 19.534 | 81 | 103 | 5.384 | 702 | 8.190 | 10.100 | Western Region |
| Rég. centr. industr. | 341 | 565 | 3 | 1 | 6.697 | 9.670 | 22.532 | 44.284 | 125 | 424 | 10.532 | 1.911 | 17.042 | 32.971 | Centr. Industr. Reg. |
| Région centrale de la terre noire . . | 982 | 2.003 | 0 | 0 | 4.934 | 5.167 | 20.483 | 29.070 | 160 | 98 | 18.305 | 2.661 | 15.487 | 16.819 | Central Black Earth Region |
| Rég.duVolga moyen. | 970 | 1.174 | 0 | 0 | 3.626 | 4.485 | 27.082 | 25.573 | 5 | 50 | 21.862 | 4.091 | 9.843 | 5.942 | Middle Volga Reg. |
| Région de Viatka-Vietluga . . . . | 74 | 55 | 0 | 0 | 429 | 568 | 8.968 | 11.237 | 1 | 41 | 7.279 | 449 | 1.854 | 2.100 | Viatka-Vietluga Region |
| Région de l'Oural . | 291 | 297 | 0 | 0 | 1.996 | 2.549 | 24.350 | 33.444 | 4 | 27 | 60.134 | 9.998 | 9.629 | 6.859 | Ural Region |
| Rég. du Volga infér. | 484 | 1.273 | 0 | 0 | 2.432 | 2.871 | 10.848 | 14.823 | 28 | 142 | 9.031 | 2.846 | 3.690 | 5.297 | Lower Volga Region |
| Région du sud-est. | 1.118 | 1.312 | 86 | 8 | 2.250 | 2.430 | 9.656 | 9.239 | 191 | 174 | 14.383 | 4.222 | 8.127 | 4.423 | South-Eastern Reg. |
| *b* Ukraine. . . . . | 2.309 | 3.874 | 11 | 0 | 13.353 | 10.275 | 25.816 | 31.869 | 196 | 521 | 54.814 | 4.214 | 31.514 | 17.698 | Ukraine *b* |
| Transcaucasie . . . | 285 | 214 | 0 | 0 | 481 | 569 | 2.592 | 4.849 | 16 | 5 | 1.609 | 491 | 1.694 | 1.582 | Transcaucasia |
| Sibérie et Républ. de l'Extrême Orient. | 342 | 463 | 2 | 0 | 2.986 | 2.952 | 28.247 | 41.561 | 11 | 31 | 23.561 | 6.006 | 14.071 | 9.092 | Siberia and Far-Eastern Republic |
| Rép. des Kirghizes . | 178 | 303 | 5 | 0 | 379 | 336 | 4.848 | 4.077 | 1 | 21 | 5.820 | 2.273 | 1.801 | 949 | Kirghiz Republic |
| Rép. du Turkestan . | 92 | 38 | 5 | 0 | 263 | 129 | 2.666 | 1.085 | 33 | — | 2.082 | 792 | 1.059 | 407 | Turkestan Republic |
| Chemins de fer, voies fluviales et prisons | 145 | 130 | 2 | 0 | 2.783 | 2.326 | 12.352 | 7.299 | 40 | 37 | 15.892 | 1.415 | 6.023 | 3.963 | Railways, Waterways and Prisons |
| Total pour la Russie | 7.801 | 11.951 | 114 | 9 | 47.770 | 51.378 | 214.862 | 293.689 | 960 | 1.804 | 258.271 | 42.886 | 133.912 | 124.801 | Total for Russia |

| Divisions | Grippe Influenza *a* | | Paludisme Malaria | | Peste Plague | | Scarlatine Scarlet fever | | Scorbut Scurvy | | Typhus exanth. Typhus | | Variole Smallpox | | Divisions |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1923 | 1924 | 1923 | 1924 | 1923 | 1924 | 1923 | 1924 | 1923 | 1924 | 1923 | 1924 | 1923 | 1924 | |
| Région du nord-est | 29.648 | 51.322 | 38.932 | 10.503 | 0 | 0 | 3.323 | 3.920 | 566 | 1.977 | 6.101 | 4.349 | 8.653 | 4.066 | North-East. Region |
| Région dunord-ouest | 36.081 | 68.629 | 4.501 | 6.482 | 0 | 0 | 3.561 | 10.694 | 3.207 | 1.631 | 6.084 | 7.448 | 1.103 | 839 | North-West. Region |
| Région de l'ouest . | 81.025 | 101.935 | 24.214 | 24.548 | 0 | 0 | 5.477 | 9.072 | 3.636 | 1.413 | 10.569 | 10.723 | 897 | 522 | Western Region |
| Rég. centr. industr. | 172.628 | 283.949 | 334.815 | 179.640 | 0 | 0 | 20.675 | 48.441 | 5.504 | 2.742 | 34.454 | 27.153 | 3.003 | 2.107 | Centr. Industr. Reg. |
| Région centrale de la terre noire . . | 94.015 | 106.633 | 273.680 | 323.993 | 0 | 0 | 16.327 | 15.279 | 4.547 | 2.013 | 15.659 | 7.835 | 2.026 | 399 | Central Black Earth Region |
| Rég. du Volga moyen | 123.150 | 114.280 | 1 183.871 | 771.603 | 0 | 0 | 9.755 | 10.965 | 10.611 | 3.845 | 22.319 | 10.580 | 3.472 | 3.877 | Middle Volga Reg. |
| Région de Viatka-Vietluga . . . . | 46.038 | 50.563 | 66.292 | 45.539 | 0 | 0 | 2.856 | 3.612 | 4.404 | 1.250 | 22.181 | 4.831 | 2.693 | 958 | Viatka-Vietluga Region |
| Région de l'Oural . | 56.056 | 123.474 | 375.854 | 636.448 | 47 | 0 | 1.960 | 6.280 | 2.227 | 2.669 | 39.588 | 8.798 | 4.084 | 4.729 | Ural Region |
| Rég. du Volga infér. | 55.009 | 65.376 | 754.025 | 566.076 | 0 | *c* 45 | 7.216 | 9.326 | 1.120 | 693 | 6.881 | 5.540 | 436 | 222 | Lower Volga Reg. |
| Région du sud-est. | 61.913 | 86.076 | 808.558 | 614.056 | 0 | 0 | 1.923 | 4.414 | 3.252 | 1.112 | 5.672 | 1.829 | 2.766 | 877 | South-Eastern Reg. |
| *b* Ukraine. . . . . | — | *d* 28.432 | — | 822.961 | 0 | 0 | 19.474 | 17.185 | — | — | 31.307 | 12.225 | 3.710 | 863 | Ukraine *b* |
| Transcaucasie . . . | 3.684 | 11.248 | 153.234 | 115.476 | 0 | 0 | .330 | 200 | 712 | 80 | 2.663 | 1.070 | 734 | 157 | Transcaucasia |
| Sibérie et Républ. de l'Extrême-Orient. | 113.544 | 149.890 | 218.120 | 364.689 | 0 | 5 | 7.128 | 7.274 | 1.343 | 1.503 | 26.124 | 9.698 | 7.221 | 2.672 | Siberia and Far-Eastern Republic |
| Rép. des Kirghizes. | 19.492 | 71.221 | 171.032 | 138.447 | 166 | *c* 434 | 281 | 480 | 438 | 560 | 1.512 | 874 | | | Kirghiz Republic |
| Rép. du Turkestan. | 9.189 | 8.489 | 80.563 | 39.825 | 0 | 54 | 95 | 33 | 1.223 | — | 1.249 | 747 | 940 | 729 | Turkestan Republic |
| Chemins de fer, voies fluviales et prisons | 181.544 | 78.391 | 609.323 | 288.509 | 0 | 0 | 7.858 | 9.222 | 4.781 | 1.308 | 10.527 | 2.200 | 710<br>2.178 | 323<br>727 | Railways, Waterways and Prisons |
| Total pour la Russie. | 1.083.016 | 1.399.923 | 5.556 856 | 4.948.785 | 213 | *c* 538 | 108.239 | 156.397 | 47.571 | 22.796 | 242.890 | 115.900 | 44.626 | 24.067 | Total for Russia |

*a* Pour l'Ukraine, les renseignements pour la grippe ne sont donnés que pour huit mois: janvier-août. — For Ukraine, data for influenza are given for ieght months only, January-August.
*b* Données pour neuf mois seulement: janvier-septembre. — Data given for nine months only, January-September.
*c* Y compris des cas de l'épidémie ayant débuté en octobre 1923. — Including cases of the epidemic which began in October 1923.
*d* Données pour sept mois seulement: janvier à juillet. — Data given for seven months only, January to July.

## RUSSIE — RUSSIA

**Nombre de cas de certaines maladies transmissibles déclarés en 1924; par mois.**

**Number of Cases of Certain Communicable Diseases reported in 1924; by months.**

*Source:* Rapport du Service statistique du Commissariat du Peuple pour la Santé publique. — Report from Statistical Division, People's Health Commissariat.

| Maladie — Disease | | Total 1924 | Jan. Jan. | Fév. Feb. | Mars March | Avril April | Mai May | Juin June | Juill. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RUSSIE (total). — RUSSIA (total). (Population: 134 853 752. R. 15 mars 1923.) | | | | | | | | | | | | | | |
| Anthrax | Anthrax | 13014 | 593 | 496 | 440 | 482 | 588 | 1189 | 2331 | 2369 | 2081 | 1336 *d* | 773 *d* | 336 *d* |
| Choléra asiatique | Asiatic cholera | 9 | 0 | 0 | 0 | 0 | 0 | 7 | 2 | 0 | 0 | 0 | 0 | 0 |
| Diphtérie | Diphtheria | 56262 | 4312 | 3752 | 3815 | 3564 | 4387 | 3832 | 4764 | 5174 | 6400 | 7295 | 5393 | 3191 |
| Dysenterie | Dysentery | 302990 | 4511 | 3754 | 3656 | 4490 | 9020 | 30514 | 81407 | 90002 | 45889 | 20394 | 6051 | 3302 |
| Encéphalite létharg. | Encephalitis letharg. | 2113 | 163 | 194 | 208 | 176 | 175 | 183 | 362 | 203 | 83 | 119 | 123 | 124 |
| Fièvre récurrente | Relapsing fever | 42616 | 7648 | 6960 | 5341 | 5124 | 3949 | 2644 | 3049 | 2633 | 2248 | 1556 | 688 | 776 |
| Fièvre typhoïde | Enteric fever | 138035 | 10397 | 8183 | 7505 | 6425 | 5914 | 5166 | 9629 | 18220 | 22533 | 22170 | 15254 | 6639 |
| Grippe | Influenza | 1301811 | 152368 | 124298 | 109361 | 116838 | 99581 | 81903 | 111335 | 102413 | 103764 | 114494 | 77998 | 107458 |
| Paludisme | Malaria | 5019109 | 131894 | 167533 | 284910 | 672049 | 1027177 | 782713 | 627682 | 494506 | 401844 | 221829 | 112754 | 94218 |
| Peste | Plague | 260 | 169 | 19 | 0 | c 27 | 37 | 0 | 0 | 2 | 0 | 0 | 0 | 6 |
| Scarlatine | Scarlet fever | 174294 | 10129 | 9914 | 10048 | 8076 | 9522 | 8846 | 16517 | 14999 | 23685 | 27872 | 20865 | 13821 |
| Scorbut | Scurvy | 22703 | 2309 | 2517 | 2925 | 3382 | 2192 | 2064 | 1438 | 1337 | 943 | 1236 | 819 | 1541 |
| Typhus exanthém. | Typhus | 114175 | 15675 | 18950 | 20240 | 17210 | 15457 | 8150 | 4570 | 2931 | 2347 | 2164 | 2234 | 4227 |
| Variole | Smallpox | 22917 | 2652 | 3679 | 3456 | 3518 | 2935 | 2002 | 1047 | 567 | 683 | 735 | 782 | 861 |
| RUSSIE D'EUROPE (Ukraine non comprise). — EUROPEAN RUSSIA (without the Ukraine). (Population: 78 919 750. R. 15 mars 1923.) | | | | | | | | | | | | | | |
| Anthrax | Anthrax | 6904 | 302 | 293 | 206 | 245 | 334 | 687 | 1123 | 1187 | 1189 | 722 | 314 | 302 |
| Choléra asiatique | Asiatic cholera | 8 | 0 | 0 | 0 | 0 | 0 | 6 | 2 | 0 | 0 | 0 | 0 | 0 |
| Diphtérie | Diphtheria | 34421 | 2551 | 2482 | 2479 | 2277 | 2828 | 2257 | 3050 | 3093 | 3560 | 4372 | 2807 | 2665 |
| Dysenterie | Dysentery | 202501 | 2992 | 2721 | 2550 | 3005 | 6487 | 24768 | 60388 | 57337 | 27401 | 9366 | 2843 | 2643 |
| Encéphalite létharg. | Encephalitis letharg. | 1398 | 98 | 125 | 93 | 100 | 112 | 142 | 276 | 156 | 42 | 62 | 76 | 116 |
| Fièvre récurrente | Relapsing fever | 27723 | 4521 | 4421 | 3394 | 3107 | 2630 | 1668 | 2448 | 1668 | 1691 | 1049 | 451 | 675 |
| Fièvre typhoïde | Enteric fever | 88516 | 5776 | 5126 | 4589 | 4078 | 3905 | 3422 | 7314 | 14174 | 15694 | 12309 | 6485 | 5644 |
| Grippe | Influenza | 1027164 | 111501 | 95160 | 90326 | 86206 | 77357 | 63852 | 78959 | 81745 | 85111 | 100047 | 66125 | 90775 |
| Paludisme | Malaria | 3271293 | 91419 | 122473 | 206841 | 437769 | 656230 | 463292 | 399747 | 319828 | 266149 | 154787 | 75816 | 76942 |
| Peste | Plague | 31 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| Scarlatine | Scarlet fever | 120018 | 7593 | 7419 | 7805 | 6049 | 7329 | 6645 | 8783 | 10253 | 14776 | 18551 | 12751 | 12064 |
| Scorbut | Scurvy | 18454 | 1850 | 1945 | 2557 | 2724 | 1995 | 1651 | 829 | 974 | 643 | 1129 | 680 | 1477 |
| Typhus exanthém. | Typhus | 87119 | 11063 | 13807 | 15443 | 12845 | 12312 | 6577 | 3665 | 2405 | 1926 | 1749 | 1554 | 3773 |
| Variole | Smallpox | 17449 | 1986 | 2897 | 2835 | 2480 | 2326 | 1466 | 733 | 436 | 478 | 571 | 624 | 687 |
| UKRAINE. (Population: 27 628 381. R. 15 mars 1923.) | | | | | | | | | | | | | | |
| Anthrax | Anthrax | 4848 | 198 | 146 | 179 | 170 | 188 | 414 | 952 | 920 | 707 | 576 | 398 | *a* |
| Choléra asiatique | Asiatic cholera | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Diphtérie | Diphtheria | 14749 | 1062 | 793 | 913 | 702 | 1054 | 923 | 1144 | 1500 | 2184 | 2351 | 2123 | |
| Dysenterie | Dysentery | 43136 | 552 | 429 | 648 | 675 | 1263 | 2445 | 6351 | 9711 | 9795 | 8881 | 2386 | |
| Encéphalite létharg. | Encephalitis letharg. | 625 | 40 | 59 | 98 | 67 | 63 | 39 | 83 | 35 | 37 | 57 | 47 | |
| Fièvre récurrente | Relapsing fever | 4505 | 858 | 681 | 802 | 514 | 442 | 346 | 195 | 198 | 178 | 186 | 105 | |
| Fièvre typhoïde | Enteric fever | 33546 | 2624 | 1865 | 1930 | 1223 | 1142 | 980 | 1089 | 2105 | 4740 | 8265 | 7583 | |
| Grippe | Influenza | 14486 | 3647 | *a* | *a* | *a* | *a* | *a* | 10839 | *a* | *a* | *a* | *a* | |
| Méningite cérébro-spin. | Cerebro-spin. mening. | 507 | 28 | 57 | 52 | 39 | 105 | 51 | 50 | 27 | 31 | 35 | 32 | |
| Paludisme | Malaria | 867086 | 5957 | 9310 | 42835 | 111470 | 219072 | 161126 | 125605 | 85531 | 62363 | 29521 | 14296 | |
| Scarlatine | Scarlet fever | 35694 | 1263 | 1150 | 1086 | 776 | 904 | 1012 | 6027 | 2953 | 6742 | 7323 | 6458 | |
| Scorbut | Scurvy | — | — | — | — | — | — | — | — | — | — | — | — | |
| Typhus exanthém. | Typhus | 12802 | 2070 | 2597 | 2798 | 1926 | 1533 | 663 | 271 | 178 | 189 | 220 | 358 | |
| Variole | Smallpox | 1012 | 126 | 132 | 158 | 102 | 103 | 96 | 50 | 29 | 67 | 85 | 64 | |
| TRANSCAUCASIE, SIBÉRIE ET ASIE CENTRALE. — TRANSCAUCASUS, SIBERIA AND CENTRAL ASIA. (Population: 28 305 621. R. 15 mars 1923.) | | | | | | | | | | | | | | |
| Anthrax | Anthrax | 1117 | 77 | 48 | 50 | 59 | 60 | 78 | 232 | 245 | 164 | 23 | 56 | 25 |
| Choléra asiatique | Asiatic cholera | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diphtérie | Diphtheria | 3984 | 439 | 296 | 250 | 378 | 355 | 500 | 293 | 331 | 359 | 271 | 247 | 265 |
| Dysenterie | Dysentery | 48726 | 767 | 484 | 347 | 642 | 1009 | 2154 | 12242 | 20709 | 7707 | 1627 | 582 | 456 |
| Encéphalite létharg. | Encephalitis letharg. | 60 | 15 | 4 | 6 | 6 | 0 | 2 | 3 | 12 | 4 | 0 | 0 | 8 |
| Fièvre récurrente | Relapsing fever | 8933 | 1938 | 1595 | 945 | 1276 | 721 | 553 | 366 | 710 | 351 | 295 | 113 | 70 |
| Fièvre typhoïde | Enteric fever | 11662 | 1554 | 897 | 794 | 894 | 715 | 621 | 1006 | 1403 | 1485 | 987 | 714 | 592 |
| Grippe | Influenza | 178793 | 24101 | 19507 | 12999 | 21658 | 17640 | 14536 | 16391 | 14832 | 12865 | 7730 | 6809 | 9725 |
| Paludisme | Malaria | 607891 | 20720 | 23366 | 19972 | 84563 | 114374 | 123734 | 68702 | 56609 | 51360 | 20940 | 12478 | 11073 |
| Peste | Plague | 229 | 144 | 19 | 0 | c 27 | 37 | 0 | 0 | 2 | 0 | 0 | 0 | 0 |
| Scarlatine | Scarlet fever | 7890 | 596 | 730 | 714 | 780 | 872 | 727 | 841 | 754 | 685 | 297 | 407 | 487 |
| Scorbut | Scurvy | 2721 | 314 | 416 | 193 | 391 | 40 | 249 | 478 | 279 | 243 | 58 | 53 | 7 |
| Typhus exanthém. | Typhus | 11786 | 2053 | 2059 | 1612 | 2082 | 1410 | 791 | 580 | 292 | 191 | 114 | 250 | 352 |
| Variole | Smallpox | 3691 | 442 | 632 | 365 | 841 | 441 | 383 | 235 | 76 | 71 | 46 | 43 | 116 |
| VOIES FLUVIALES, CHEMINS DE FERS ET PRISONS. — WATERWAYS, RAILWAYS AND PRISONS. | | | | | | | | | | | | | | |
| Anthrax | Anthrax | 145 | 16 | 9 | 5 | 8 | 6 | 10 | 24 | 17 | 21 | 15 | 5 | 9 |
| Choléra asiatique | Asiatic cholera | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diphtérie | Diphtheria | 2731 | 260 | 181 | 173 | 207 | 150 | 152 | 277 | 250 | 297 | 301 | 222 | 261 |
| Dysenterie | Dysentery | 8627 | 200 | 120 | 111 | 168 | 261 | 1147 | 2426 | 2245 | 986 | 520 | 240 | 203 |
| Encéphalite létharg. | Encephalitis letharg | 30 | 10 | 6 | 11 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fièvre récurrente | Relapsing fever | 1455 | 331 | 263 | 200 | 227 | 156 | 77 | 40 | 57 | 28 | 26 | 19 | 31 |
| Fièvre typhoïde | Enteric fever | 4311 | 443 | 295 | 192 | 230 | 152 | 143 | 220 | 538 | 614 | 609 | 472 | 403 |
| Grippe | Influenza | 81368 | 13119 | 9631 | 6036 | 8974 | 4584 | 3515 | 5146 | 5836 | 5788 | 6717 | 5064 | 6958 |
| Paludisme | Malaria | 272839 | 13798 | 12384 | 15262 | 38247 | 37501 | 34561 | 33628 | 32538 | 21972 | 16581 | 10164 | 6203 |
| Scarlatine | Scarlet fever | 10692 | 677 | 615 | 443 | 471 | 417 | 462 | 866 | 1039 | 1482 | 1701 | 1249 | 1270 |
| Scorbut | Scurvy | 1528 | 145 | 156 | 175 | 267 | 157 | 164 | 131 | 84 | 57 | 49 | 86 | 57 |
| Typhus | Typhus | 2448 | 489 | 487 | 387 | 357 | 202 | 119 | 54 | 56 | 41 | 81 | 73 | 102 |
| Variole | Smallpox | 765 | 98 | 88 | 98 | 95 | 65 | 57 | 29 | 26 | 67 | 33 | 51 | 58 |

N.B. — Les données pour les derniers mois sont incomplètes. — The data for the recent months are incomplete.

*a* Les données manquent. — Data are missing.

*b* Mois inconnu. — Month unknown.

*c* Ces cas survinrent dans la région Amu-Darja pendant la période du 1er janvier au 30 avril. — Occurred in Amu-Darja region during period from January 1st to April 30th.

*d* Sans l'Ukraine. — Without the Ukraine.

## TERRITOIRE DE LA SARRE — SAAR TERRITORY

(Population: 763 196. E. 31 déc. 1924.)

**Nombre de cas de maladies à déclaration obligatoire et de décès causés par ces maladies déclarés en 1921-1924; par semaines en 1924.**
**Number of Cases of and Deaths from Notifiable Diseases reported in 1921-1924; by weeks in 1924.**

*Source:* Rapports de la Commission de gouvernement. — Reports from the Governing Commission.

| Semaine finissant le: Week ending: | Diphtérie Diphtheria | | Dysenterie Dysentery | Encéphalite léthargique Encephalitis lethargica | | Fièvre puerpérale Puerperal fever | | Fièvre paratyphoïde Paratyphoid fever | Fièvre typhoïde Typhoid fever | | Méningite cérébro-spinale Cerebro-spinal meningitis | | Scarlatine Scarlet fever | | Tuberculose, toutes formes Tuberculosis, all forms | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | C. | D. | C. | C. | D. | C. | D. | C. | C. | D. | C. | D. | C. | D. | C. | D. |
| Total 1921 | 285 | 27 | 148 | 223 | 54 | 92 | 27 | 33 | 205 | 25 | 15 | 6 | 192 | 5 | — | 851 |
| Total 1922 | 208 | 35 | 28 | 21 | 7 | 79 | 29 | 17 | 193 | 26 | 27 | 11 | 148 | 2 | — | 923 |
| Total 1923 | 265 | 48 | 53 | 23 | 0 | 99 | 27 | 22 | 130 | 12 | 50 | 27 | 165 | 5 | — | 950 |
| Total 1924 | 311 | 44 | 11 | 29 | 12 | 72 | 16 | 58 | 136 | 14 | 76 | 28 | 256 | 7 | 1054 | 774 |
| Janvier-January 5 | 5 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 33 | 5 |
| 12 | 5 | 1 | 0 | 1 | 0 | 1 | 3 | 0 | 1 | 0 | 0 | 0 | 4 | 1 | 12 | 16 |
| 19 | 6 | 1 | 1 | 0 | 0 | 5 | 3 | 0 | 2 | 1 | 0 | 1 | 3 | 0 | 18 | 10 |
| 26 | 6 | 1 | 0 | 1 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 1 | 2 | 0 | 9 | 14 |
| Février-February 2 | 6 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 1 | 0 | 1 | 0 | 5 | 0 | 39 | 15 |
| 9 | 4 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 4 | 0 | 1 | 0 | 4 | 0 | 26 | 16 |
| 16 | 6 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 36 | 12 |
| 23 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 16 | 14 |
| Mars-March 1 | 9 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 1 | 0 | 37 | 21 |
| 8 | 9 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 5 | 2 | 1 | 0 | 12 | 12 |
| 15 | 14 | 4 | 1 | 0 | 0 | 1 | 0 | 0 | 4 | 0 | 2 | 3 | 4 | 0 | 16 | 20 |
| 22 | 10 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 3 | 0 | 4 | 0 | 5 | 0 | 12 | 15 |
| 29 | 10 | 3 | 0 | 0 | 0 | 4 | 0 | 2 | 4 | 1 | 1 | 0 | 5 | 0 | 17 | 19 |
| Avril-April 5 | 14 | 2 | 0 | 1 | 1 | 2 | 0 | 0 | 1 | 0 | 4 | 0 | 4 | 0 | 17 | 25 |
| 12 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 2 | 0 | 3 | 2 | 7 | 0 | 20 | 16 |
| 19 | 14 | 5 | 1 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 0 | 40 | 19 |
| 26 | 8 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 2 | 1 | 2 | 0 | 4 | 0 | 23 | 13 |
| Mai-May 3 | 5 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 2 | 0 | 7 | 0 | 24 | 14 |
| 10 | 4 | 1 | 0 | 2 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 3 | 0 | 25 | 22 |
| 17 | 3 | 0 | 0 | 1 | 1 | 4 | 1 | 0 | 0 | 0 | 3 | 0 | 7 | 0 | 23 | 14 |
| 24 | 5 | 2 | 1 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 3 | 0 | 3 | 0 | 40 | 14 |
| 31 | 9 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 1 | 1 | 3 | 3 | 2 | 0 | 19 | 13 |
| Juin-June 7 | 3 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 5 | 0 | 1 | 3 | 5 | 2 | 33 | 13 |
| 14 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 6 | 0 | 4 | 1 | 39 | 15 |
| 21 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 7 | 0 | 1 | 0 | 0 | 0 | 26 | 16 |
| 28 | 4 | 1 | 0 | 2 | 2 | 0 | 0 | 1 | 5 | 0 | 2 | 1 | 4 | 0 | 32 | 20 |
| Juillet-July 5 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 1 | 7 | 0 | 26 | 24 |
| 12 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 0 | 2 | 0 | 2 | 0 | 26 | 16 |
| 19 | 5 | 1 | 0 | 0 | 0 | 2 | 0 | 2 | 2 | 0 | 0 | 1 | 1 | 0 | 20 | 19 |
| 26 | 9 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 4 | 0 | 1 | 0 | 5 | 0 | 23 | 16 |
| Août-August 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 4 | 0 | 22 | 11 |
| 9 | 4 | 0 | 0 | 3 | 0 | 4 | 0 | 2 | 3 | 1 | 0 | 0 | 2 | 0 | 9 | 17 |
| 16 | 6 | 0 | 2 | 1 | 0 | 1 | 1 | 7 | 2 | 1 | 1 | 0 | 5 | 1 | 18 | 16 |
| 23 | 3 | 0 | 0 | 1 | 1 | 2 | 1 | 6 | 9 | 0 | 1 | 0 | 9 | 0 | 18 | 14 |
| 30 | 5 | 2 | 0 | 1 | 0 | 2 | 1 | 2 | 4 | 0 | 0 | 0 | 10 | 1 | 11 | 9 |
| Sept.-Sept. 6 | 3 | 3 | 0 | 1 | 2 | 0 | 0 | 4 | 4 | 0 | 0 | 0 | 10 | 0 | 19 | 15 |
| 13 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 2 | 0 | 0 | 8 | 0 | 20 | 13 |
| 20 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 1 | 2 | 1 | 3 | 0 | 7 | 18 |
| 27 | 3 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 3 | 1 | 0 | 0 | 5 | 0 | 13 | 22 |
| Octobre-October 4 | 9 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 6 | 0 | 1 | 0 | 10 | 0 | 19 | 16 |
| 11 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 5 | 3 | 0 | 0 | 0 | 4 | 0 | 23 | 19 |
| 18 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 0 | 1 | 1 | 3 | 0 | 9 | 4 |
| 25 | 5 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 4 | 0 | 3 | 1 | 4 | 0 | 15 | 16 |
| Nov.-Nov. 1 | 9 | 0 | 1 | 1 | 1 | 1 | 0 | 2 | 5 | 0 | 3 | 0 | 10 | 0 | 14 | 5 |
| 8 | 10 | 1 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 0 | 1 | 1 | 8 | 0 | 14 | 13 |
| 15 | 7 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 1 | 1 | 8 | 0 | 13 | 6 |
| 22 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 2 | 5 | 1 | 1 | 0 | 5 | 0 | 6 | 12 |
| 29 | 3 | 0 | 0 | 1 | 1 | 2 | 0 | 1 | 2 | 1 | 0 | 0 | 4 | 0 | 10 | 14 |
| Déc.-Dec. 6 | 3 | 0 | 0 | 0 | 0 | 3 | 1 | 3 | 1 | 0 | 1 | 1 | 6 | 0 | 18 | 13 |
| 13 | 6 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 2 | 0 | 11 | 0 | 11 | 14 |
| 20 | 13 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 1 | 1 | 2 | 1 | 8 | 1 | 13 | 7 |
| 27 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 2 | 0 | 7 | 0 | 10 | 12 |
| * 28-31 | 5 | 2 | 0 | 1 | 0 | 1 | 1 | 1 | 2 | 0 | 0 | 0 | 6 | 0 | 3 | 10 |

Autres maladies déclarées: — Other diseases notified:

| | Botulisme Botulism | | Dysenterie Dysentery | Fièvre paratyphoïde Paratyphoid fever | Poliomyélite Poliomyelitis | | Trachome Trachoma |
|---|---|---|---|---|---|---|---|
| | C. | D. | D. | D. | C. | D. | C. |
| 1921 | — | — | 11 | 1 | — | — | — |
| 1922 | — | — | 1 | 0 | — | — | — |
| 1923 | — | — | 9 | 2 | 3 | 3 | 6 |
| 1924 | 1 | 0 | 1 | 2 | 2 | 0 | 3 |

* Données pour quatre jours seulement. — Data for four days only.

## SUÈDE — SWEDEN (Population: 5 970 918. E. 31 déc. 1922.)

**Nombre de cas de maladies à déclaration obligatoire déclarés en 1919-1924; par quinzaines en 1924.**
**Number of Cases of Notifiable Diseases reported in 1919-1924; by half-months in 1924.**

*Sources:* Tableau résumé des Rapports relatifs aux épidémies, 1924. Rapport spécial pour les années 1919-1923. — Special Report for the years 1919-1923.

| Quinzaine / Half-month | | | Diphtérie Diphtheria | Dysenterie Dysentery | Encéphalite léthargique Enceph. leth. | Fièvre typhoïde Enteric fever | Grippe Influenza | Méningite cérébro-spinale Cer.-spin. men. | Poliomyélite Poliomyelitis | Scarlatine Scarlet fever | Chancre mou Soft chancre | Gonorrhée Gonorrhœa | Syphilis acquise Acquired syphilis: Primaire Primary | Secondaire Secondary | Total | Syphilis congénitale Congen. syph. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total 1919 | | | 40514 | 53 | — | 3827 | 210000 | 116 | 820 | 9310 | 3327 | 20651 | 3363 | 2613 | 5976 | 148 |
| Total 1920 | | | 26448 | 71 | 352 | 1266 | 65194 | 102 | 181 | 9750 | 1237 | 14996 | 1756 | 1528 | 3284 | 165 |
| Total 1921 | | | 15133 | 125 | 1512 | 1123 | 20569 | 120 | 141 | 9264 | 879 | 12646 | 1317 | 940 | 2257 | 117 |
| Total 1922 | | | 6610 | 63 | 192 | 896 | 92671 | 79 | 112 | 10718 | 513 | 10953 | 807 | 648 | 1455 | 93 |
| Total 1923 | | | 4840 | 37 | 530 | 808 | 18032 | 85 | 309 | 10829 | 295 | 10337 | 575 | 512 | 1087 | 102 |
| Total 1924 | | | 3929 | 85 | 300 | 1404 | 8676 | 116 | 653 | 11022 | 211 | 10299 | 489 | 367 | 856 | 63 |
| Janvier | January | 1-15 | 185 | 0 | 11 | 25 | 191 | 1 | 9 | 386 | 14 | 453 | 30 | 11 | 41 | 4 |
| | | 16-31 | 213 | 7 | 21 | 41 | 391 | 7 | 12 | 492 | 10 | 469 | 32 | 19 | 51 | 3 |
| Février | February | 1-15 | 194 | 0 | 31 | 15 | 1073 | 2 | 10 | 499 | 9 | 362 | 27 | 17 | 44 | 1 |
| | | 16-29 | 174 | 1 | 32 | 48 | 1367 | 8 | 4 | 477 | 5 | 290 | 24 | 10 | 34 | 5 |
| Mars | March | 1-15 | 124 | 0 | 23 | 54 | 1044 | 8 | 3 | 436 | 7 | 348 | 22 | 23 | 45 | 2 |
| | | 16-31 | 131 | 0 | 20 | 39 | 1256 | 5 | 4 | 505 | 9 | 362 | 29 | 13 | 42 | 1 |
| Avril | April | 1-15 | 134 | 1 | 10 | 20 | 1074 | 3 | 2 | 512 | 8 | 352 | 15 | 18 | 33 | 3 |
| | | 16-30 | 102 | 1 | 15 | 21 | 602 | 10 | 7 | 399 | 14 | 329 | 15 | 24 | 39 | 2 |
| Mai | May | 1-15 | 120 | 0 | 14 | 22 | 383 | 6 | 6 | 453 | 8 | 355 | 13 | 16 | 29 | 4 |
| | | 16-31 | 131 | 1 | 5 | 20 | 141 | 1 | 5 | 393 | 12 | 372 | 22 | 22 | 44 | 7 |
| Juin | June | 1-15 | 120 | 2 | 7 | 29 | 37 | 7 | 3 | 343 | 8 | 368 | 28 | 10 | 38 | 2 |
| | | 16-30 | 122 | 0 | 4 | 49 | 31 | 6 | 10 | 351 | 5 | 406 | 25 | 12 | 37 | 4 |
| Juillet | July | 1-15 | 117 | 0 | 9 | 42 | 21 | 3 | 3 | 326 | 7 | 468 | 15 | 4 | 19 | 1 |
| | | 16-31 | 123 | 0 | 5 | 89 | 40 | 8 | 17 | 295 | 13 | 458 | 13 | 15 | 28 | 2 |
| Août | August | 1-15 | 160 | 0 | 5 | 95 | 34 | 3 | 36 | 221 | 9 | 470 | 19 | 9 | 28 | 0 |
| | | 16-31 | 205 | 1 | 17 | 118 | 30 | 7 | 72 | 353 | 8 | 517 | 12 | 21 | 33 | 4 |
| Septembre | September | 1-15 | 196 | 0 | 8 | 154 | 16 | 2 | 68 | 383 | 7 | 562 | 21 | 9 | 30 | 3 |
| | | 16-30 | 151 | 1 | 13 | 103 | 88 | 3 | 124 | 417 | 7 | 510 | 16 | 18 | 34 | 2 |
| Octobre | October | 1-15 | 181 | 0 | 11 | 176 | 82 | 7 | 86 | 609 | 11 | 561 | 26 | 15 | 41 | 8 |
| | | 16-31 | 238 | 1 | 9 | 73 | 71 | 3 | 69 | 754 | 8 | 511 | 27 | 24 | 51 | 1 |
| Novembre | November | 1-15 | 224 | 3 | 10 | 46 | 197 | 6 | 33 | 714 | 12 | 483 | 13 | 12 | 25 | 1 |
| | | 16-30 | 252 | 2 | 3 | 45 | 171 | 1 | 28 | 659 | 11 | 408 | 10 | 11 | 21 | 1 |
| Décembre | December | 1-15 | 188 | 48 | 10 | 39 | 165 | 6 | 25 | 563 | 2 | 418 | 17 | 19 | 36 | 2 |
| | | 16-31 | 144 | 16 | 7 | 41 | 171 | 3 | 12 | 482 | 7 | 467 | 18 | 15 | 33 | 0 |

Variole, 7 cas en 1919, 11 cas en 1920, 2 cas en 1921 et 1 cas en 1924. — Smallpox, 7 cases in 1919, 11 cases in 1920, 2 cases in 1921. 1 case in 1924.

Pas de cas de choléra asiatique, de peste ou de typhus exanthématique, 1919-1924. — No case of Asiatic cholera, plague or typhus, 1919-1924.

## TCHÉCOSLOVAQUIE — CZECHOSLOVAKIA (Population: 13 982 726. E. 31 déc. 1923.)

**Nombre de cas de maladies à déclaration obligatoire et de décès causés par ces maladies déclarés en 1920-1924; par mois en 1924.**
**Number of Cases of and Deaths from Notifiable Diseases reported in 1920-1924; by months in 1924.**

*Source:* Rapports spéciaux du Ministère de la Santé publique et d'Education. — Special Reports from the Ministry of Public Health and Education.

| Maladie — Disease | | | Total 1920 | Total 1921 | Total 1922 | Total 1923 | Total 1924 | Jan. Jan. | Fév. Feb. | Mars Mar. | Avril April | Mai May | Juin June | Juil. July | Août Aug. | Sept. Sept. | Oct. Oct. | Nov. Nov. | Déc. Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Anthrax | Anthrax | C. | 5 | 49 | 81 | 54 | 67 | 0 | 4 | 2 | 3 | 3 | 7 | 16 | 11 | 6 | 5 | 6 | 4 |
| | | D. | 3 | 6 | 5 | 5 | 7 | 0 | 1 | 0 | 1 | 0 | 2 | 2 | 1 | 0 | 0 | 0 | 0 |
| Diphtérie | Diphtheria | C. | 4872 | 4380 | 3223 | 3159 | 3548 | 306 | 336 | 302 | 318 | 285 | 250 | 209 | 211 | 274 | 303 | 388 | 366 |
| | | D. | 637 | 470 | 327 | 231 | 232 | 26 | 19 | 24 | 23 | 17 | 11 | 8 | 11 | 12 | 27 | 23 | 31 |
| Dysenterie | Dysentery | C. | 8211 | 8238 | 1453 | 1539 | 1347 | 32 | 23 | 48 | 29 | 26 | 39 | 78 | 205 | 232 | 321 | 246 | 68 |
| | | D. | 1129 | 953 | 141 | 101 | 96 | 1 | 1 | 3 | 3 | 2 | 1 | 4 | 14 | 12 | 28 | 23 | 4 |
| Encéphalite léthargique | Encephalitis lethargica | C. | — | — | 150 | 366 | 97 | 7 | 9 | 22 | 25 | 8 | 5 | 8 | 0 | 3 | 0 | 6 | 4 |
| | | D. | — | — | 59 | 119 | 32 | 2 | 1 | 9 | 6 | 1 | 2 | 4 | 0 | 2 | 0 | 3 | 2 |
| Fièvre puerpér. | Puerperal fever | C. | 729 | 720 | 643 | 638 | 580 | 54 | 50 | 54 | 68 | 46 | 33 | 32 | 54 | 42 | 54 | 42 | 51 |
| | | D. | 386 | 361 | 318 | 277 | 214 | 19 | 23 | 23 | 19 | 24 | 7 | 10 | 19 | 22 | 6 | 16 | 26 |
| Fièvre récurr. | Relapsing fever | C. | 19 | 14 | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fièvre paratyph. | Paratyph. fever | C. | — | — | — | — | 175 | 8 | 4 | 1 | 0 | 3 | 67 | 56 | 12 | 7 | 11 | 5 | 1 |
| | | D. | — | — | — | — | 6 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 2 | 0 | 0 | 0 |
| Fièvre typhoïde | Typhoid fever | C. | 7399* | 9331* | 6612* | 5508* | 6645 | 502 | 357 | 350 | 446 | 319 | 409 | 589 | 793 | 683 | 794 | 802 | 601 |
| | | D. | 950* | 969* | 651* | 416* | 492 | 42 | 35 | 35 | 32 | 26 | 37 | 33 | 42 | 30 | 71 | 59 | 50 |
| Grippe | Influenza | C. | — | — | 86788 | 1407 | — | | | | | | | | | | | | |
| | | D. | — | — | 597 | 57 | — | | | | | | | | | | | | |
| Méningite cérébro-spinale | Cerebro-spinal meningitis | C. | 75 | 80 | 190 | 142 | 145 | 4 | 9 | 9 | 23 | 22 | 24 | 13 | 8 | 10 | 3 | 8 | 12 |
| | | D. | 24 | 34 | 73 | 46 | 51 | 2 | 3 | 6 | 4 | 11 | 6 | 4 | 3 | 3 | 0 | 5 | 4 |
| Paludisme | Malaria | C. | 229 | 130 | 76 | 266 | 134 | 0 | 1 | 2 | 1 | 16 | 29 | 41 | 24 | 10 | 5 | 4 | 1 |
| | | D. | 3 | 0 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rage humaine | Human rabies | C. | 7 | 24 | 52 | 22 | 20 | 3 | 0 | 1 | 1 | 3 | 3 | 1 | 5 | 1 | 1 | 1 | 0 |
| | | D. | 7 | 24 | 52 | 22 | 20 | 3 | 0 | 1 | 1 | 3 | 3 | 1 | 5 | 1 | 1 | 1 | 0 |
| Scarlatine | Scarlet fever | C. | 4188 | 9425 | 10784 | 10522 | 9709 | 1058 | 897 | 815 | 639 | 506 | 533 | 445 | 510 | 736 | 1034 | 1285 | 1251 |
| | | D. | 156 | 906 | 1215 | 755 | 464 | 66 | 84 | 42 | 33 | 26 | 25 | 20 | 20 | 36 | 33 | 50 | 29 |
| Trachome | Trachoma | C. | 3308 | 3252 | 2739 | 3338 | 2782 | 269 | 273 | 224 | 258 | 300 | 246 | 217 | 194 | 233 | 251 | 176 | 141 |
| Typhus exanth. | Typhus | C. | 3019 | 970 | 321 | 366 | 44 | 14 | 8 | 8 | 1 | 1 | 4 | 3 | 0 | 0 | 0 | 0 | 5 |
| | | D. | 644 | 111 | 28 | 10 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Variole | Smallpox | C. | 4529 | 1542 | 70 | 36 | 9 | 0 | 0 | 1 | 1 | 6 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| | | D. | 723 | 312 | 11 | 5 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

7 cas et 2 décès de morve en 1923. — 7 cases and 2 deaths from glanders in 1923.
Pas de cas de choléra asiatique et pas de décès de fièvre récurrente, 1920-1924. — No case of Asiatic cholera and no death from relapsing fever, 1920-1924.
* Ces totaux comprennent aussi les données pour la fièvre paratyphoïde. — Data for paratyphoid fever are included in these totals.

## SUISSE — SWITZERLAND

(Population: 3 902 000. E. 30 juin 1923.)

**Nombre de cas de maladies à déclaration obligatoire déclarés en 1919-1924; par semaines en 1924.**

**Number of Cases of Notifiable Diseases reported in 1919-1924; by weeks in 1924.**

*Source:* Bulletin du Service fédéral de l'hygiène publique, Berne.

| Année et semaine finissant le: Year and week ending: | Coqueluche Whooping-cough | Diphtérie Diphtheria | Dysenterie Dysentery | Encéphalite léthargique Encephalitis lethargica | Erysipèle Erysipelas | Fièvre puerpérale Puerperal fever | Fièvre paratyph. Paratyph. fever | Fièvre typhoïde Typhoid fever | Grippe Influenza | Méningite cérébr.-spin. Cerebro-spinal men. | Oreillons Mumps | Poliomyélite aiguë Poliomyelitis, acute | Rougeole Measles | Scarlatine Scarlet fever | Varicelle Chickenpox | Variole Smallpox |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total 1919 | 3121 | 7690 | 36 | — | 204 | 63 | 62 | 298 | 86058 | 30 | 319 | 31 | 9127 | 3865 | 1455 | 3 |
| Total 1920 | 2514 | 8456 | 30 | 984 | 298 | 83 | 46 | 290 | 139809 | 39 | 956 | 104 | 15194 | 3939 | 1219 | 2 |
| Total 1921 | 1675 | 7702 | 32 | 156 | 232 | 72 | 57 | 394 | 2058 | 32 | 616 | 72 | 3070 | 3733 | 2112 | 596 |
| Total 1922 | 3439 | 4415 | 5 | 62 | 200 | 77 | 79 | 263 | 60295 | 30 | 246 | 65 | 3930 | 2272 | 2202 | 1153 |
| Total 1923 | 1571 | 3297 | 10 | 203 | 160 | 57 | 116 | 340 | 2150 | 69 | 185 | 257 | 10316 | 2137 | 2104 | 2126 |
| * Total 1924 | 1551 | 2656 | 9 | 85 | 159 | 44 | 44 | 257 | 30262 | 33 | 1190 | 110 | 3301 | 2351 | 2082 | 1234 |
| Janvier — January 5 | 20 | 70 | 0 | 1 | 2 | 0 | 1 | 1 | 4 | 1 | 19 | 2 | 78 | 42 | 44 | 56 |
| 12 | 12 | 78 | 0 | 0 | 4 | 0 | 1 | 3 | 38 | 2 | 14 | 0 | 121 | 56 | 59 | 44 |
| 19 | 20 | 61 | 0 | 0 | 1 | 0 | 0 | 4 | 60 | 0 | 22 | 2 | 54 | 51 | 45 | 77 |
| 26 | 40 | 79 | 0 | 2 | 3 | 2 | 0 | 1 | 328 | 1 | 14 | 2 | 98 | 55 | 66 | 73 |
| Février — February 2 | 6 | 48 | 0 | 2 | 3 | 0 | 0 | 8 | 721 | 1 | 20 | 2 | 127 | 56 | 48 | 84 |
| 9 | 26 | 53 | 0 | 1 | 9 | 7 | 0 | 2 | 2646 | 0 | 27 | 2 | 75 | 71 | 65 | 81 |
| 16 | 30 | 54 | 0 | 3 | 7 | 1 | 0 | 3 | 4544 | 2 | 28 | 4 | 105 | 57 | 71 | 71 |
| 23 | 38 | 79 | 0 | 4 | 3 | 2 | 0 | 4 | 5563 | 0 | 22 | 6 | 86 | 60 | 54 | 97 |
| Mars — March 1 | 40 | 67 | 0 | 3 | 7 | 3 | 1 | 0 | 4472 | 0 | 47 | 0 | 107 | 68 | 64 | 26 |
| 8 | 35 | 59 | 0 | 3 | 6 | 2 | 1 | 1 | 4224 | 3 | 33 | 7 | 75 | 67 | 61 | 52 |
| 15 | 30 | 54 | 0 | 2 | 4 | 0 | 1 | 2 | 2708 | 1 | 18 | 2 | 96 | 61 | 55 | 43 |
| 22 | 27 | 57 | 0 | 4 | 1 | 2 | 0 | 1 | 1573 | 0 | 29 | 0 | 51 | 43 | 74 | 41 |
| 29 | 31 | 54 | 0 | 1 | 6 | 1 | 0 | 2 | 1565 | 1 | 34 | 1 | 68 | 50 | 53 | 49 |
| Avril — April 5 | 25 | 67 | 1 | 2 | 9 | 0 | 0 | 2 | 853 | 1 | 27 | 0 | 60 | 74 | 91 | 35 |
| 12 | 14 | 54 | 0 | 5 | 2 | 0 | 0 | 3 | 377 | 0 | 57 | 1 | 57 | 66 | 31 | 26 |
| 19 | 13 | 41 | 0 | 6 | 3 | 0 | 0 | 1 | 226 | 0 | 28 | 0 | 70 | 56 | 33 | 24 |
| 26 | 26 | 44 | 0 | 9 | 1 | 1 | 0 | 1 | 75 | 0 | 45 | 0 | 55 | 61 | 34 | 23 |
| Mai — May 3 | 22 | 43 | 0 | 4 | 3 | 3 | 0 | 4 | 30 | 1 | 35 | 0 | 68 | 52 | 25 | 18 |
| 10 | 21 | 42 | 0 | 1 | 5 | 0 | 0 | 1 | 31 | 1 | 23 | 0 | 35 | 58 | 23 | 26 |
| 17 | 15 | 34 | 0 | 3 | 3 | 0 | 0 | 4 | 29 | 0 | 24 | 1 | 28 | 45 | 44 | 33 |
| 24 | 25 | 45 | 0 | 5 | 0 | 0 | 0 | 2 | 10 | 1 | 26 | 0 | 48 | 39 | 26 | 24 |
| 31 | 22 | 55 | 0 | 1 | 3 | 3 | 1 | 1 | 11 | 1 | 36 | 0 | 42 | 48 | 51 | 29 |
| Juin — June 7 | 12 | 30 | 0 | 2 | 3 | 1 | 1 | 5 | 10 | 0 | 36 | 1 | 45 | 57 | 43 | 13 |
| 14 | 20 | 51 | 0 | 0 | 5 | 3 | 0 | 2 | 5 | 1 | 35 | 2 | 61 | 56 | 24 | 19 |
| 21 | 21 | 27 | 0 | 0 | 1 | 1 | 0 | 2 | 4 | 0 | 20 | 1 | 69 | 43 | 40 | 25 |
| 28 | 16 | 27 | 0 | 1 | 4 | 0 | 0 | 3 | 2 | 0 | 28 | 2 | 69 | 40 | 24 | 7 |
| Juillet — July 5 | 48 | 32 | 0 | 3 | 0 | 0 | 0 | 4 | 0 | 2 | 12 | 3 | 49 | 56 | 32 | 16 |
| 12 | 19 | 32 | 0 | 1 | 0 | 0 | 5 | 7 | 4 | 0 | 17 | 5 | 82 | 27 | 31 | 3 |
| 19 | 26 | 24 | 0 | 3 | 2 | 1 | 2 | 3 | 0 | 0 | 21 | 3 | 80 | 28 | 46 | 4 |
| 26 | 42 | 33 | 0 | 3 | 2 | 1 | 0 | 3 | 1 | 0 | 7 | 0 | 86 | 31 | 29 | 2 |
| Août — August 2 | 29 | 22 | 0 | 1 | 2 | 1 | 1 | 3 | 0 | 3 | 4 | 3 | 16 | 21 | 27 | 5 |
| 9 | 28 | 34 | 0 | 0 | 1 | 2 | 9 | 3 | 0 | 0 | 9 | 2 | 45 | 45 | 22 | 4 |
| 16 | 22 | 33 | 0 | 0 | 4 | 0 | 1 | 14 | 3 | 0 | 7 | 3 | 18 | 29 | 24 | 10 |
| 23 | 41 | 50 | 0 | 0 | 3 | 0 | 3 | 17 | 4 | 0 | 13 | 7 | 67 | 38 | 17 | 2 |
| 30 | 36 | 29 | 0 | 0 | 0 | 0 | 1 | 15 | 0 | 0 | 2 | 1 | 22 | 38 | 16 | 10 |
| Septembre-September 6 | 27 | 38 | 0 | 0 | 4 | 0 | 1 | 7 | 3 | 0 | 6 | 4 | 22 | 40 | 18 | 12 |
| 13 | 19 | 47 | 0 | 0 | 0 | 0 | 0 | 6 | 7 | 0 | 0 | 7 | 22 | 22 | 10 | 6 |
| 20 | 45 | 54 | 0 | 1 | 3 | 0 | 0 | 10 | 2 | 1 | 1 | 0 | 10 | 31 | 13 | 10 |
| 27 | 57 | 53 | 0 | 3 | 0 | 0 | 1 | 10 | 2 | 0 | 5 | 1 | 44 | 23 | 17 | 12 |
| Octobre — October 4 | 32 | 39 | 0 | 0 | 5 | 0 | 0 | 5 | 3 | 0 | 8 | 2 | 41 | 29 | 50 | 7 |
| 11 | 17 | 62 | 0 | 0 | 5 | 1 | 1 | 6 | 4 | 1 | 12 | 7 | 45 | 31 | 30 | 7 |
| 18 | 40 | 50 | 3 | 0 | 1 | 1 | 1 | 7 | 7 | 0 | 28 | 2 | 42 | 29 | 43 | 0 |
| 25 | 25 | 48 | 0 | 0 | 1 | 0 | 0 | 13 | 10 | 1 | 16 | 0 | 30 | 18 | 41 | 3 |
| Novembre-November 1 | 21 | 51 | 1 | 0 | 0 | 4 | 2 | 12 | 2 | 1 | 10 | 1 | 29 | 39 | 36 | 4 |
| 8 | 14 | 41 | 1 | 0 | 2 | 0 | 1 | 13 | 7 | 2 | 19 | 4 | 29 | 27 | 15 | 2 |
| 15 | 19 | 59 | 1 | 0 | 1 | 0 | 1 | 4 | 10 | 0 | 13 | 3 | 63 | 36 | 44 | 1 |
| 22 | 46 | 61 | 0 | 1 | 4 | 0 | 1 | 6 | 3 | 1 | 11 | 3 | 54 | 36 | 39 | 8 |
| 29 | 30 | 48 | 0 | 0 | 1 | 0 | 1 | 4 | 19 | 0 | 25 | 4 | 57 | 39 | 37 | 0 |
| Décembre-December 6 | 76 | 71 | 1 | 0 | 1 | 1 | 1 | 6 | 12 | 0 | 33 | 1 | 127 | 38 | 47 | 0 |
| 13 | 58 | 62 | 1 | 1 | 2 | 0 | 1 | 5 | 7 | 1 | 40 | 1 | 83 | 71 | 35 | 4 |
| 20 | 53 | 104 | 0 | 2 | 9 | 0 | 2 | 2 | 25 | 2 | 53 | 0 | 120 | 35 | 53 | 2 |
| 27 | 38 | 51 | 0 | 0 | 3 | 0 | 0 | 8 | 5 | 0 | 42 | 3 | 73 | 32 | 24 | 2 |
| 1925 Janv.-January 3 | 36 | 55 | 0 | 1 | 5 | 0 | 1 | 1 | 13 | 0 | 29 | 2 | 97 | 30 | 38 | 2 |

Autres maladies déclarées: — Other diseases notified:

| | Anthrax Anthrax | Fièvre récurrente Relapsing fever | Hoquet épidém. Epidem. hiccough | Maladie de Weil Weil's disease | Morve Glanders | Ophtalmie des nouveaux-nés Ophthalmia neonatorum | Ophtalmoblen. des nouveaux-nés Ophthalmobl. neonatorum | Paludisme Malaria | Rubéole German measles | Stomatite Stomatitis | Teigne Favus | Tétanos Tetanus | Trachome Trachoma | Typhus exanthém. Typhus |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1919 | — | — | — | — | — | 15 | — | — | 238 | — | — | — | — | — |
| 1920 | — | 1 | — | — | 0 | 10 | 0 | 24 | 352 | — | 5 | — | — | 1 |
| 1921 | 1 | 0 | 64 | 7 | 0 | 9 | 0 | 5 | 237 | 6 | 0 | 2 | 3 | 2 |
| 1922 | 0 | 0 | 21 | 0 | 0 | 8 | 0 | 3 | 43 | 0 | 0 | 0 | 5 | 0 |
| 1923 | 2 | 0 | 43 | 0 | 0 | 13 | 0 | 5 | 56 | 2 | 0 | 2 | 8 | 0 |
| 1924 | 2 | 0 | 10 | 0 | 1 | 7 | 2 | 6 | 52 | 0 | 12 | 0 | 13 | 0 |

1 cas de lèpre provenant de Bolivie traité à Bâle en novembre 1924. — 1 case of leprosy, originating from Bolivia, treated in Basle in November 1924.

* 53 semaines. — 53 weeks.

# MALADIES A DÉCLARATION OBLIGATOIRE DANS DIFFÉRENTS PAYS DU MONDE

*Source:* Le chiffre qu'on trouve après le nom de chaque pays indique la source de nos renseignements: (1) Liste officielle; (2) Rapport spécial; (3) Enquête sanitaire; (4) Rapp
périodiques de morbidité.

| MALADIES | EUROPE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | AFRIQUE — AFRICA | | | | | | | | | | | | | | | | | | |

# NOTIFIABLE DISEASES IN VARIOUS PARTS OF THE WORLD

The number after the name of each country indicates the source, as follows: (1) Official list; (2) Special report; (3) Sanitary survey; (4) Current reports of cases.

| AMÉRIQUE — AMERICA | | |

## PUBLICATIONS DE LA SECTION D'HYGIÈNE

(Argent suisse)

L'INCIDENCE DES MALADIES ÉPIDÉMIQUES, ainsi que l'organisation et le fonctionnement des Services sanitaires des Ports en Extrême-Orient. Rapport soumis au Comité d'hygiène de la Société des Nations par F. Norman White. (C. H. 130) . . Fr 7.—

LA PROPHYLAXIE DE LA DIPHTÉRIE par le dépistage des réceptifs et leur immunisation artificielle active aux Etats-Unis par le Dr Louis van Bœckel, Directeur du Laboratoire de l'Administration d'Hygiène de Belgique. (C. 169. M. 45. 1924. III. C. H. 184) . . . . . Fr 2 —

RAPPORT PROVISOIRE SUR LA TUBERCULOSE ET LA MALADIE DU SOMMEIL EN AFRIQUE ÉQUATORIALE, présenté par MM. Andrew Balfour, C.B., C.M.G., M.D.; E. van Campenhout, M.D., le professeur Gustave Martin et A. G. Bagshawe, M.D., membres de la Commission d'experts nommée en 1922 par le Comité d'hygiène de la Société des des Nations. (C. 8. M. 6. 1924. III.) . . . . . Fr 5 —

INVESTIGATIONS SUR LE SÉRODIAGNOSTIC DE LA SYPHILIS: Rapport de la Conférence technique de Laboratoire (tenue à Copenhague du 19 novembre au 3 décembre 1923) et deux annexes . Fr 4 —

Rapports sur les RECHERCHES SÉROLOGIQUES présentés à la deuxième Conférence internationale sur la standardisation des sérums et des réactions sérologiques, tenue à l'Institut Pasteur, à Paris, en novembre 1922 . . . . . Fr 10.—

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